COMMERCIAL
CAR JOURNAL

PHILADELPHIA PENNA.
OCTOBER, 1932 VOL. XLIV, No. 2

THE PRESIDENT'S PAGE

READJUSTMENTS of the past two years have brought business and industry down to bed-rock in manufacturing and distributing costs. In so far as physical operations are concerned, the automobile industry has met the situation adequately. There has been no cowardly solution of simply shutting down plants and cutting payrolls until the storm blows over. Efforts have been made to continue production of more efficient automobiles and trucks at lower costs, and, by passing these economies along to the public, to stimulate sales in this industry which is so vital to American business.

But I wonder if we have got down to bed-rock in the more intangible things which are, after all, the determining factors in the success or failure of a business. The first and tritest rule of business conduct is "Honesty is the best policy."

To apply this to the trucking business—without any beating about the bush—I mean to ask in all sincerity and humility whether manufacturing and sales policies in truck divisions have had the truck buyers' best interests as their goal. It is a question of good judgment rather than one of good intentions.

We have been selling vehicles, which is a mistake. What we ought to sell with every truck is the assurance of profit on the operation of the truck. Sales appeals have been based on appearance, on speed, on power, on capacity when it ought to be obvious that no single one of these factors makes a good truck. Speed, power, capacity and appearance plus dependability, economical operation and long life is the proper formula for a truck that will bring a profit to its operator.

We ought not to think of it as selling just cast iron and steel. The truck should be a unit of transportation, developed through the best engineering study to combine speed, power and capacity at no sacrifice of dependability, economy of operation and appearance.

This is no Utopian vehicle. It is simply a matter of engineering and production skill. If the development of commercial vehicles has not kept pace with passenger cars, it has not been due to lack of engineering and production facilities, but rather due to a feeling by some manufacturers that the field was limited and, therefore, less profitable. That is a common though not a wise viewpoint.

Truck Manufacturers and Sales Organizations That Work for the Truck Users' Economic Operation Will Find an Increasing Appreciation of Their Vehicles.

By

K T Keller

President
Dodge Brothers Corp.

Any truck merchant realizes that, generally speaking, every trucking operation has its peculiar problems, and therefore presents different requirements. This complicates the retailer's job. He must try to sell speed when, perhaps, power and capacity are actually the factors that will permit the trucking concern to make a profit. Or again, he may be able to swing the prospect into line by trading on "appearance" alone when, as a matter of cold business judgment, attractive appearance in a particular case is relatively unimportant and is only one of the many things to be considered.

Pressure to make sales "at any cost" has been applied by the times, and I doubt that any of us has been entirely free of blame on this point. But it has made truck sales extremely expensive, for we cannot profit unless the trucking business is profitable. Poor buying advice makes no money for the operator—and, in the end, makes no money for the dealer who makes a bad sale.

Unless the truck operator can make a satisfactory profit, he will not stay in business, and truck manufacturers lose a customer. This means that the market for trucks is restricted, temporarily at least. Multiply one bad sale by the thousands that occur and you begin to get a picture of an industry that is in danger of strangling itself.

That is why it is a serious mistake for a dealer to sell a truck that will not meet the specific needs of the prospect. I do not pretend to say that our own dealers are above criticism. One of the most serious practices that we have had to contend with is the temptation to sell a light truck, on its price appeal alone, when a heavier one is needed to do the job properly.

The honest and wiser course for the dealer would be to quote the unit that will best do the job—regardless of

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AUTHOR'S NOTE—This article, like its September predecessor, "Our Industry Needs Leaders—Not Drivers," is written with the full knowledge that it is hazardous to express too many opinions, even though the opinions are based on actual experience.

VOLUMES could be written concerning wholesale distribution, commonly known as "dealer operations," and whereas the operations have been multitudinous and have met with varied success, the "patient" is in rather tough shape due to numerous complications, but principally that deadly and highly infectious disease, "Overtraditis."

From the era when trucks were shipped to the dealer sight-draft and through the palmy days when bankers would finance them, up to the present time the dealer has been the victim of everything but assault and battery because he has tried to merchandise trucks on the same basis as the manufacturers themselves do. The dealer, however, has not been able to meet the situation quite as successfully only because of his inability to consistently play the annual game of "write-offs" or "write-downs" — take your choice.

Not long ago I had the interesting experience of covering quite an extensive territory with a wholesale manager of a truck company who was doing everything possible to sell his dealer organization on the idea of merchandising a large volume of trucks at a profit. This wholesale manager was good, in fact 'way above the average. But in the final analysis in each instance the case came to rest when inventory was taken and actual appraisals were made of the used trucks on hand unsold.

Manufacturers have made heroic efforts, expended huge sums of money, developed hundreds of ideas, yes, bent right over backwards, so to speak, from a time just prior to the depression, to assist the dealer in every way to sell trucks on reasonable terms at a fair profit. But the same sponge—over-allowances—soon absorbs operating capital, and you cannot squeeze it out again. The dealer is up against the same cut-throat competition the branch-house organization has to fight, with less margin than the branch.

Automotive dealers, to a considerable extent, have not always been good business men. Too many of them thought in terms of gross sales rather than net profits. But today I believe we can say he is a much better business man than ever before because experience has taught him the difference between volume and profits, and he has learned to control overhead. There is considerable evidence now that manufacturers are awake to the fact that unless their dealers prosper they themselves cannot stay in business.

At the present time the truck industry is waging a hard battle to retain dealers. Most all of the factories are making a remarkable effort in that direction. But it surely must be evident to anyone not completely blinded by factory sales tradition that the scarcity of dealer material and of dealer capital will very soon make it necessary to completely revise present sales policies. The truck manufacturers either will be forced to merchandise most of their products directly with the assistance of much fewer dealers, or devise some way of making the business profitable enough to invite outside capital. To make the business attractive, the wide-

Does Our Industry Need a Dictator?

Inflated List Prices and Over-Allowances on Trade-ins Are Deep-Rooted Evils That Must Be Eradicated and Can Be if the Trucking Industry Wills It

spread practice of overtrading must be curbed.

In the final analysis, there is only one thing basically wrong with the truck business, and that is this bad business practice of bidding against each other for almost every order so that, due to over-allowances or trade-ins, little or no profit is left for the successful bidder—and frequently a loss. And in the face of this intolerable situation we are constantly striving for volume. Just like taking bad medicine and asking for more of it in copious doses.

This practice is most destructive, to say the least, of sound merchandising principles. It burlesques real sales ability and retards enthusiasm. It is bad education in every respect, and seriously discourages stock investments and dividend-paying possibilities to those who have invested. In fact, it is responsible for practically all of our troubles.

This cancer of the truck business—excessive trade allowances on used trucks—could be eradicated or at least controlled if the manufacturers would come to some agreement among themselves whereby fixed allowances would be made on each make based upon junk values, and whereby the trade-in would be scrapped, not resold. Trade-ins not coming under the heading of obsolete equipment could also be traded in on predetermined allowances and resold. I mention this merely to emphasize the fact that this asinine practice can and must be remedied if the motor truck industry is to build up and remain in a healthy condition.

Other trade groups have eliminated unfair and disastrous competition by law or mutual agreement and have, by these means, revived the "dying goose" to the extent that it has again been able to lay golden eggs. I have heard arguments advanced why it was almost impossible to bring all of the manufacturers into binding agreement, as suggested above, and although these manufacturers will agree that in so doing, the greatest handicap to the industry would be eliminated. I have never heard a single executive suggest a plan or idea as to how it might be accomplished.

It has been said more than once that fear of judicial investigation because restraint of trade was involved, was the real obstacle preventing the eradication of this practice of over-allowance by general agreement. In reality if it were not for the real fear that the majority or all manufacturers would not fall in line and adhere strictly to a "red book" price, this profit-destroying plague would quickly be eliminated for all time, and every sales manager and salesman would breathe a long-suppressed sigh of relief.

I have talked with a great many men in every position in the truck business, and financers outside of the industry, and everyone to a man has cursed the prevalence of over-allowance. Yet the evil continues unabated. It certainly does seem rather strange that every manufacturer does not of his own accord set about to stop it.

Mouthful of Facts

Running hand-in-hand with over-allowance is price inflation. This was very ably treated by Mr. Cleary, president of S.P.A. Truck Co., in the June issue of the COMMERCIAL CAR JOURNAL and further reinforced by an operator's viewpoint, which was expressed by J. R. Bingaman in the July number. In fact, Mr. Bingaman's article was about the biggest mouthful of facts rightfully hurled at our industry by an operator in a long time. There is no question that the facts related by Mr. Bingaman reflected the opinions of countless truck operators and, I might add, truck salesmen as well.

Price inflation, sometimes called "watering," is the offspring of the trade-in evil. Price inflation and over-allowance have become such an overgrown combination that when a prospective customer, who is not a truck owner, is ready to buy, he is frequently advised to purchase a junk truck so that it may be traded in at an over-allowance in order that he may procure as much for his money as the buyer who really has a truck to trade, regardless of their comparative values.

The trade-in evil can be eradicated, or at least controlled, if the industry but wills it. Let's get back to real merchandising, replace the premium that rightfully belongs to real sales ability, and do it now. Let merit of product and ability of management decide the fate of the present surviving manufacturers and put a stop to this dog-eat-dog variety of competition fostered by anxiety for volume that would not be tolerated by any other industry.

The petroleum industry has had its struggle up and down, yet the companies have the merchandising end of their business fairly well stabilized and under control. They are strongly associated for the good of the oil industry. Competition is exceedingly keen but the oil companies are not resorting to bartering, nor do they permit the buyer to dictate terms or price.

The moving picture industry had

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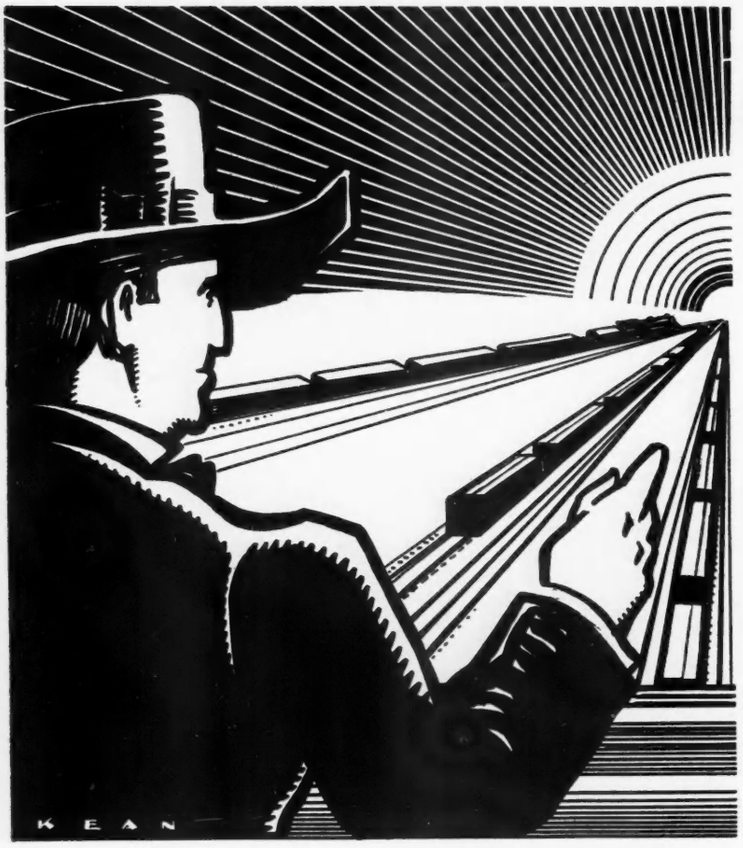
WATCH FOR COMMENTS

In the November issue we will publish the many interesting and thought-provoking comments and opinions stimulated by the Author's first sally against the evils in the truck industry, "Our Industry Needs Leaders—Not Drivers," which appeared in the September issue.

The Trade-In, another member of the "ugly" company that has been stalking the industry for years, is the theme of the current article. The subject is close to all in the trucking business, and all desiring to unburden themselves of ideas, opinions or criticisms on the subject will find welcome in the columns of Commercial Car Journal.

Couzens Points Out Course For Railroads to Follow



Senator Says They Must Face Realities of Competition; Not Ask Public to Pay Cost of Obsolete Equipment

By James Couzens

Chairman of the Interstate Commerce Committee of the U. S. Senate

EDITOR'S NOTE—Here is an interesting discussion of the rail-truck case by the distinguished Senator from Michigan. It is important because of its sensible advice to the railroads and its fairness to trucks and other competing transportation services.

The statement originally was published in a copyright interview in The Detroit News and client newspapers of the North American Newspaper Alliance. Senator Couzens, when approached by a representative of COMMERCIAL CAR JOURNAL, said the news statement was accurate and that he had nothing to add.

The only liberty which the editor has exercised is in altering the sequence of the Senator's arguments.

IF Governor Roosevelt, the Interstate Commerce Commission, and others who indorse the plan for relief of the railroads as outlined by the Democratic presidential nominee in his Salt Lake City speech, believe that we must have monopoly in transportation through the consolidation and coordination of transportation by railroad, motor vehicle water carriers and airplane, I disagree.

This does not mean I am not anxious to straighten out inequalities of opportunity. But when that has been done I desire that each means of transportation shall get the business it is best adapted to handle, without interference from any other agency of transportation.

By no means do I desire to cripple the railroads, but I ask them to face the realities of the situation. The railroads do not want Government regulation abolished.

If Government regulation were withdrawn, they would engage in competitive methods that would ruin the weaker lines and, in all probability, take the stronger ones with them. The protection the Government gives them against these competitive methods is something no other private industry gets.

I favor both state and Federal Government regulation of motorbus and motor truck transportation, but I warn against regulation which attempts to put up the cost of the service equal to that necessary to maintain the railroads.

Let the railroads recognize competitive conditions and strip to the bone for action, and they will get all the business which logically belongs to them because of bulk or long haul freight, leaving to other transportation facilities such business as these can efficiently handle.

The railroads must strip themselves of all unnecessary or obsolete facilities and expect a return only on necessary or useful capital.

What I mean by "obsolete" are facilities not needed as a result of the rapid development of good roads and the motor industry.

It is roughly estimated there are 70,000 railroad stations that ought to be abandoned. There are many thousands of miles of branch and short line railroads not needed, because motor vehicles give service more efficiently.

Hundreds of millions of dollars are invested in great terminal facilities for handling less-than-carload and other short-haul business—facilities that, in my judgment, will never be needed again.

Neither Governor Roosevelt nor Congress should contemplate that the public continue to pay freight rates sufficiently high to give a return on these unnecessary facilities. While the railroads are the backbone of our transportation service, the public should not be asked to pay a return on obsolete or unnecessary facilities any more than they should be asked to pay a return on obsolete or unnecessary facilities in any other line of business.

Until a few years ago, the railroad industry generally was considered a monoply. Many railroad owners have not yet awakened to the changed conditions which have removed them from the monopolistic class. They still think it the Government's responsibility to see that they get an adequate return on all their facilities, whether or not used or useful. They have not been required to compete on rates for many decades, because the Government has guaranteed them against competitive rates.

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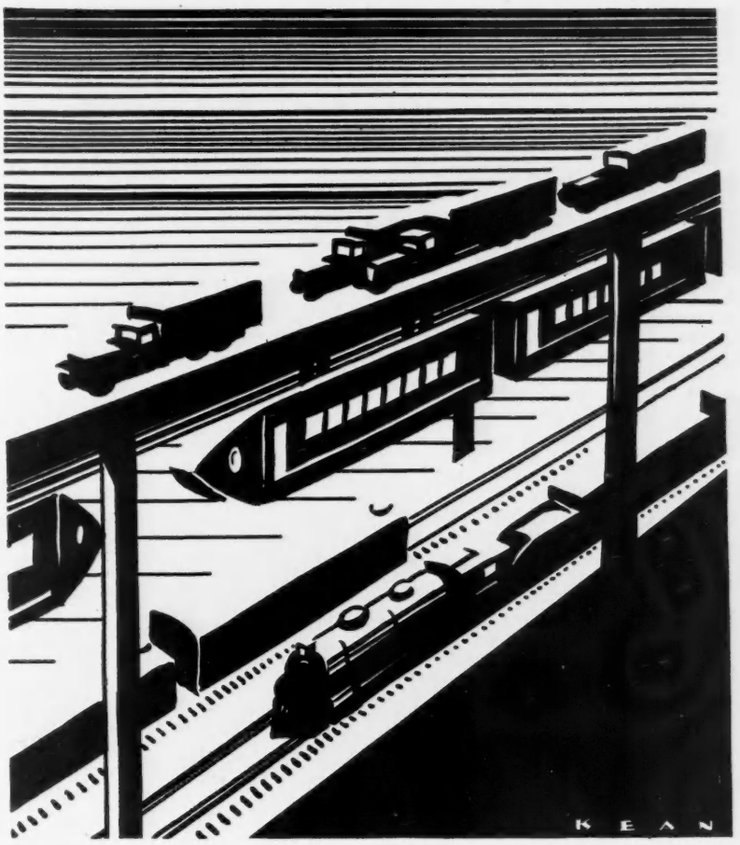
RAILROADS HOLD THE KEY TO A SYSTEM OF SUPER-HIGHWAYS

A Scheme for Coordinating Rail and Motor Traffic by Building Elevated Railways and Highways Over Trunk Lines

By LEON CAMMEN
Consulting Engineer



EDITOR'S NOTE—Our present highway system can well be likened to a babe in arms when contemplated in relation to the magnificent system visualized by Messrs. Teager and Cammen, two forward-looking engineers. This article, excerpted from, and through the courtesy of Mechanical Engineering, is a perfect complement to the superhighway ideas suggested by Mr. Teager in the August issue of COMMERCIAL CAR JOURNAL. It not only strikes at the heart of the railroads' present transportation dilemma, but blazes a way to its solution, which will at one and the same time lighten our present economic stress, advance motor transportation and provide the American public with a "new deal" in rapid passenger and freight transportation.

BOOM periods in the history of the United States have usually been based on developments in some one or two key industries. Emergence from the present slough of despond would be greatly accelerated by developments in another key industry. What is this industry?

A careful analysis indicates that the greatest need of the country today is an integrated and properly organized industry of transportation, meaning by this an industry including all forms of transportation—railroads, motor trucks, passenger cars, buses, and airplanes.

We have no such industry. We have railroads in which enormous sums are invested, but several new forms of transportation—pipe lines, trucks, automobiles, buses, airplanes—enjoy practically unrestricted competition with the railroads and are themselves operated without regard to national requirements and for individual, and often temporary and elusive, profits.

The existing situation is a difficult and disturbing one. On the one hand the transportation agencies competing with the railroads have a perfect economic justification and have come to stay. It would be possible by means of punitive taxation or special restrictive legislation to impose such handicaps on their operation as to make their competition with railroads ineffective, but this would simply mean that traffic would be forced into less suitable channels, and the result would not be to ultimate good of the community. On the other hand, the railroads are necessary, because they still constitute and apparently will continue to constitute for a number of years the cardinal method of transportation, the only one for the heavy commodities. Therefore any weakening of their operative mechanism is done at the expense of the whole nation.

The most important task today in so far as national economics is concerned is therefore to coordinate the various transportation factors in such a manner as to change the present chaos into a balanced industry of transportation. It is the purpose of this article to suggest a means by which this can be done, and which will at the same time provide an enormous amount of business for our key industries and also improve the financial standing of railroad securities.

Of late it has been suggested that the railroads should extend their operations to include highway transportation, either by building up motor-truck and motor-bus systems of their own, or even by building special highways owned and used exclusively by railroads. While this is possible, certain objections have been raised. If the railroads operate motor trucks and motor buses, their position in asking for protection against unfair competition on part of these forms of transportation becomes untenable. Obviously they cannot, for example, complain of low taxation on buses and trucks while enjoying the privileges of such a situation.

As to the building of highways (apart from roadbeds) to be owned by the railroads, two objections may be cited. In the first place, the legal and constitutional questions involved are both complicated and uncertain, and, secondly, the cost of such highways would be stupendous.

To sum up, our railroads have grown economically weak and lack capital for necessary improvements, and motor vehicles cannot operate most effectively because of limitations of the highways, which, in turn, cannot be properly improved because the

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BE SURE THAT DR(IVER) JEKYLL ISN'T A CHRONIC MONSTER HYDE

Accident Experience Study of 257 Drivers Reveals That You Cannot Judge the Safe Driver By His Appearance

EDITORIAL.—That good ol' proverb, "All is not gold that glitters," may appropriately be applied to applicants of good general appearance by wise employers of drivers, according to the findings of Dr. Alvahh R. Lauer of Iowa State College. His study revealed that there are certain definite types of dangerous drivers whose weaknesses can only be determined by a bit of practical psychology and a study of the applicant's mental processes.

In analyzing the accident experience of 257 drivers, Dr. Lauer was not only able to determine that about 33 per cent had all the accidents, and about 7 per cent had half the accidents, but he was able by cataloging the repeaters to classify the characteristics which make drivers prone to accidents. These interesting classifications, made available through the courtesy of the National Safety Council, follow and should be a great help to fleet owners anxious to penetrate beyond the superficialities of appearance into the applicant's mind and behavior.

The "Ne'er Do Well"

COMPANIES should beware of cheap help and the employment of "ne'er do wells." A study of a man's employment record should serve reasonably well as a key to whether or not he is to be placed in charge of a truck, passenger car or other vehicle. Since such drivers always put their best foot forward the employer should question carefully and find out whether they have the necessary knowledge.

The "Hot Head"

Students of abnormal psychology are familiar with paranoiac tendencies present in many persons. When so affected, the person thinks everyone is trying to get the best of him. His landlord desires to see him in the poorhouse, his wife tries to make life hard for him, the children purposely destroy his personal belongings, the neighbors do not respect him, the foreman gives him unpleasant jobs, and his salary is not adequate for a man of his caliber. Such a man is always angered by something and thus is always under a strain. He is the type who is vindictive and deliberately stops his car suddenly to "show up the driver behind." He is full of alibis and equally full of trouble.

The "Timid Soul"

Women generally are to be classed in this group, especially the more delicate ones. The effeminate man is likely

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Can Local Truckmen Slip Off the Handcuffs Binding Them?

State and Local Truck Association Secretaries Voice Opinions on Mr. Barry's 10 Recommendations for Relief

EDITOR'S PREFACE.—In the August issue appeared an article entitled "Have Local Haulers Been Handcuffed?" by Tom Barry, executive secretary of the Merchant Truckmen's Bureau of New York. Mr. Barry viewed with alarm the growing plight of the local draymen and suggested ways to remove their shackles. Mr. Barry spoke frankly and, it must be said to his credit, did not defend the mistakes his own group has made. In concluding his article he made ten recommendations.

Commercial Car Journal sent copies of the article to 44 secretaries of state and local truck associations and requested frank expressions of opinion on the recommendations. The fact that not all 44 secretaries expressed opinions on a problem of vital concern may be variously interpreted: they were too busy to put their opinions on paper; they had no regard for the suggestions; they had no opinions; they had no interest in the discussion. Personally we prefer to believe they were too busy to write.

Therefore the opinions here summarized represent the personal views of secretaries who have studied the recommendations, who are familiar with the problems under discussion and feel strongly enough to take the time to arrange their thoughts and put them down on paper. For this reason they deserve the industry's consideration.

This discussion by no means solves the problem at issue, but it does indicate several courses which concerted action may take to curb and eliminate the growing cleavage between local draymen and over-the-road haulers. Dissension within the industry must be avoided, otherwise a house divided against itself is wide open to inimical interests.

RECOMMENDATION 1. Local truckmen, in cities of the first class, might try to bring about mergers of small trucking firms, or medium-sized firms, and then sell to the railroads the idea of the new corporation taking over possible store-door delivery operations in preference to having the railroads turn over this project to the Railway Express Agency.

Opinions.—There was a well-divided difference of opinion on this proposal. Those favoring the suggested mergers had their case well summarized by Ray G. Atherton, executive secretary, Associated Motor Carriers of Oklahoma: "It is my opinion that mergers of the small or medium-size firms in cities of the first class are thoroughly desirable, and that in addition to enabling them better to approach the railroads in regard to the taking over of local delivery operations, it will benefit the industry at large by the

removal of poorly financed, poorly equipped firms which, without regard to operation costs, disrupt the local industry by constant rate cutting and similar practices. In any instance, I believe that this move will be much better for local truck men than to have the local delivery operations turned over to the Railway Express Agency."

The opposing viewpoint was tersely stated by T. A. Horrocks, secretary, Minnesota Truck Owners Association, and Day Baker, secretary, Motor Truck Club of Massachusetts. Mr. Horrocks labeled the suggestion good "if you can change human nature." "Mankind is selfish and individuals are in the main ambitious," he said, "so as fast as mergers are completed other 'small' concerns will spring up."

Mr. Baker observed that formation of mergers would tend to create a monopoly in highway transportation and shippers wouldn't stand for it. The shippers, he said, would oppose transportation domination with the purchase of trucks that would "give them personal transportation service when and where they want it."

Recommendation 2. Failing in this (mergers), local truckmen might seek to contract with the Railway Express Agency for the performance of store-door delivery.

Response Varies on No. 2

Opinions.—The response was varied. Mr. Atherton said: "It seems to me that, failing in the consolidation plan, nothing remains but for the local haulers to secure whatever contracts they can with the Railway Express Company, provided the railroads enter into an agreement with that company."

Mr. Horrocks: "I cannot see why the Railway Express Agency (railroad owned) would consider contract with local cartage companies. It *is true* that Railway Express Agency with its large fleets and personnel enjoys lower operating costs than local drayage concerns."

Asher Frank, secretary, Florida Research Motor Association: "I don't believe the Railroad Express Agency wants the business. It would mean considerable investment in new equipment, and the RRX is doubtful if the business would justify the outlay."

Recommendation 3. Local truckmen might seek to develop new forms of rail-trucking contacts and contracts, so that at least some percentage of available freight will continue to be controlled by truckmen themselves."

Opinions. — There was general agreement on this point, Day Baker elaborating on the matter as follows: "Some of our local truckmen have developed rail-trucking contracts, such contracts having been made through the rail subsidiaries, which have been extremely profitable to the few selected preferred truckmen, but very unprofitable to the railroad that supplied the funds to its subsidiary which in turn paid the trucker on a liberal per diem plus mileage basis, while the subsidiary quoted the shipper a rate far below the published rail tariff of the parent railroad. This was done in an effort to crush other truckmen, but so far has not proved a success, as those truckmen not selected have continued to give their customers their personal service, which has not been done by the rail subsidiary."

Recommendation 4. Zone tariffs, rigidly adhered to, might be drawn up and distributed by local truckmen so that trucking may be stabilized and trucking rates controlled.

Opinions.—While some secretaries said this could not be done (one secretary going so far as to remark: "Barry must have been in love when he thought of this"), others declared there must be some stabilization of trucking rates or else truckmen will continue to be afflicted with profitless paralysis.

"Unless truckmen establish local rates or zone tariffs in a way that will cause rigid enforcement, the future of highway trucking for hire is dark," said R. D. Smith, secretary, Alabama Motor Freight Association.

Mr. Atherton: "Either a system of zone tariffs or some other form of uniform rate schedules should be instituted by common consent, and put into execution through the local association, else the unprofitable and virtually disastrous rate cutting which now exists will continue to paralyze the local-haul business."

Day Baker pointed out that zone tariffs are not applicable to highway transportation because of local conditions which make some customers more accessible than others.

Recommendation 5. Terminal operations for over-road haulers might be developed, and these terminals be located outside the cities in less congested thoroughfares.

Opinions. — There was general agreement that this proposal possessed merit. "The truck terminal idea for over-road companies," said Mr. Atherton, "is taking root in Oklahoma, and at this time at least two large terminals have been instituted in Oklahoma City."

"Many savings could be made by outside city terminals," declared Mr. Frank.

"They should be practically beyond city limits," according to Mr. Smith, "and owned and controlled by the trucking interests, who should also own and control the equipment for handling pickups and deliveries."

Recommendation 6. Competing over-road truck lines might be merged into a number of well-financed companies, into efficient companies, the rates of which would be controlled by some medium other than the Interstate Commerce Commission.

Opinions.—Most of the secretaries approved this recommendation heartily. Mr. Horrocks ably summarized the reasons for approval: "I believe this would result in lower operating costs, financial strength, firmer adherence to rates and tariffs. I am in entire agreement that rates should be controlled and most decidedly by some other agency than the I. C. C."

Recommendation 7. From merged over-road carriers a Contact Board might be set up to contact with high railroad officials and thus seek to put an end to the rail-truck warfare.

Opinions.—The idea of a contact board met with practically unanimous endorsement, and was regarded as a sound approach to a sane and amicable solution of problems.

Recommendation 8. Efforts might be made to interest big shippers in the financing of mergers of over-road truck lines to the end that their influence, their tonnage, their prestige, may aid in halting the rail-truck insurrection.

Tried and Failed

Opinions.—While this was acknowledged a good thought, evidence was brought forward by several secretaries to show that it had been tried and that it had failed.

"It was tried in Minnesota three years ago," Mr. Horrocks said. "An attempt to merge all the larger common carrier regulated truck lines into one holding concern, with stock held by a representative business group, paid for by the larger class of shippers, fell through after several weeks' negotiations. My opinion is that this failed because the truck concerns were not strong financially and owed too much money and also placed too great a value on their franchises. This proposition was handled by a prominent financial business man of this city, but it failed."

"This idea of getting the large shipper interested has been tried and without success in this state," declared Mr. Frank of Florida. "Most of the large shippers are employing contract carriers who are constantly fighting the common carriers."

Mr. Way had this to say: "If a shipper has money enough to finance the merger of over-the-road truck lines, he is going to use this money for expanding his business which is his own line, and shippers and producers who specialize in producing certain commodities are not going to be drawn into the trucking business. He must be either a shipper or become a professional trucker, as he cannot function in both and be successful."

Recommendation 9. Over-road operators might make contractual relations for store-door delivery with local truckmen instead of making such deliveries themselves, and in this way make allies of local haulers instead of enemies."

Opinions.—The obstacles to such an arrangement were cited by a number

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Fig. 1—Round end tanks

Fig. 2—Roofs slope and taper

STREAMLINED TRAILERS GIVE GALES THE SLIP

Owners Are Figuring If It Pays to Reduce Wind Resistance by Streamlining Large Square Cornered Bodies

By JAMES W. COTTRELL

WIND makes happy the owners of sailboats, windmills and kites, but it inspires no such joyful thoughts in the minds of truck owners. Drivers on motor freight runs across the desert between Los Angeles and Phoenix and between the former city and Las Vegas or Boulder City, Nevada, have good reason to hate the wind at times. Frequently it blows so hard in the desert valley between the Cajon Pass and the Baker grade that trucks grunt along in second or third gear instead of speeding along in high, or overdrive, as on calm days.

Few operators are troubled by conditions which show the force of the wind so strikingly, but an increasing number are giving thought to wind resistance and streamlining. Trucks and trailers are being operated at speeds of 40 m.p.h. or better, and this is the same as a wind of that speed blowing against a stationary object.

Fortunately winds of 45 m.p.h. are not common. There were but two storms with maximum velocities of 45 miles per hour or over for a five-minute period in Philadelphia during the year 1931, according to the Weather Bureau. A 45-mile wind is classed as a gale, and such winds usually "do damage to trees, telephone lines, etc., and occasionally uproot small trees." Therefore it is not surprising that owners are wondering how much it costs them to drag a van-type body through the air at that speed. Increase the body size to that of a semi-trailer cargo-carrying van and the wonder and interest increase.

No one expects to see freight carted in an airplane fuselage, without wings, trailing behind a truck, but a start has been made in streamlining trailer van bodies, and, in the opinion of a number of trailer and body designers and fleet operators, this is just the beginning of a development. Their predictions mean still more when considered in the light of present-day business conditions when capital expenditures are restrained and all investments considered critically.

Capable of 45 m.p.h. with a 10-ton load a streamlined semi-trailer body is embodied in a high-speed heavy-duty unit employed by Pie Bakeries, Inc., Newark, N. J., to relay an average of nine tons of pie from Newark, N. J., to a Philadelphia distributing plant six nights a week.

Both front and rear ends of the body are V-shaped as shown in Fig. 3. Two spare tires and the driver's tools are carried in the front compartment, which is reached by a door on the right. The rear compartment, shown in Fig. 3, is used for regular cargo space. The V-shaped space is enclosed by two doors, each wider than conventional doors, a V-extension of the floor and four folding triangular sections. Two of these sections are hinged to the doors, one at the top of each door to form the roof of the V, and the other two are hinged to the V-shaped floor to square up the floor when loading or unloading. When the body is closed for operation on the road, each hinged floor section is folded in an upright position inside the door, and each hinged roof section is raised at right angles to the door, as shown on the right in Fig. 3. When opened for unloading the arrangement is as shown on the left of Fig. 3. The floor sections are lowered to square up the floor extension, the doors are swung around parallel with the body side, and the roof sections are folded down along the inside surface of the doors.

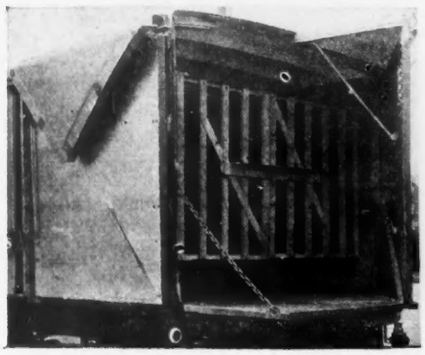

Fig. 3—Top, both ends are pointed; above, detail of folding rear end

Stanleigh Megargee, supervisor of automotive equipment, who designed the body, states that streamlining in commercial vehicles has been almost entirely neglected but has made considerable progress in passenger cars, whereas those conditions should be reversed. Streamlining of this body is a big factor, in his opinion, in the low gasoline consumption of 6.2 miles per gal. achieved by this new unit.

A modified V-front with roof curved down at the front is used in refrigerator bodies shown in Fig. 2.

Possibility of streamlining tanks for hauling liquids is suggested by the tank train recently placed in operation by the Deep Rock Oil Corp., Fig. 1. The train comprises a six-wheel truck and a four-wheel trailer, each carrying a 2500-gal. three-compartment aluminum tank. Rear end of the truck tank and the front end of the trailer tank are rounded instead of flat which permits closer coupling of tank ends and in-

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A Peek Into the Gasoline Engine's Glowing Future

ENGINEERS INTENSIFY WORSHIP OF GASOLINE ENGINE SHRINE

Designers Are Evolving New Ideas in Engine Shape, Fuel Injection, Strokes Per Cycle, Compression and Lubrication

HIGH up on the mountain of things automotive stands the gasoline engine, placed there because of its worthiness and kept there by the devotion of a band of loyal disciples. It reached its high place as a result of a long, hard struggle against strong rivals. Its present type, which is based upon the four-stroke cycle introduced by Otto in 1876, won its way over other types of gas engines and later in the early days of automobile development was challenged by steam and electric power not only in racing but in common use. At no single moment has it been free from competition. It has rivals now and will have rivals in the future.

Because the gasoline engine stands so high, many of its disciples fear that it can go no higher; that it is at the very pinnacle from which there can be movement downward only. But they are wrong. Engineers are doing things and planning to do things to the gasoline engine which they believe will place it still higher in the regard of users. They are making small changes and they are delving deep into the fundamentals and thinking of revolutionary changes.

The very shape of the gasoline engine has been fixed ever since it first took to wheels by the demands of the vehicle designer, not the engine designer. The early engines were mounted lengthwise of the frame beneath the body, therefore they were the horizontal opposed type. To make them more accessible they were put up front under a hood, and when the power required made them so large that they would not fit cross-wise of the frame the cylinders were made vertical.

A new force impels engineers to change the shape of the engine again. This time it is not engineering but legislation which calls for action. Legislators say that a truck can be so long and so wide and not an inch more. To carry a large load requires more load space and there is the hood taking up a large portion of the area determined by the law makers. So the horizontal opposed cylinder engine slung under the frame seems likely to be revived. It will not be the chugging two-lunger of the gay 90's but a much more compact and much more cylindered powerplant. It will require not so much as one square inch of load space because it will be mounted at the center of the vehicle under the frame and will be removed and replaced from below.

Another type of engine which was used in both passenger cars and trucks is being brought down from engineering attics, brushed off and inspected in the light of new knowledge. It is the two-cycle engine now chiefly known in the outboard motorboat engine field. The characteristic of the engine, as you doubtless know, is that each cylinder fires once each revolution. After ignition near top dead center the piston descends on the power stroke, and near the bottom the exhaust is discharged through ports on the side of the cylinder. Near bottom dead center other ports admit the incoming charge on the opposite side of the piston and are deflected upward by an inclined surface on top of it.

Compression takes place on the upward stroke. Note that there are no valves, the intake and exhaust being controlled by motion of the piston past cylinder ports.

Keeping the intake and exhaust gases from mixing is one of the major problems in two-cycle engine design. Applying the Diesel principle to two-cycle engines sweeps aside this

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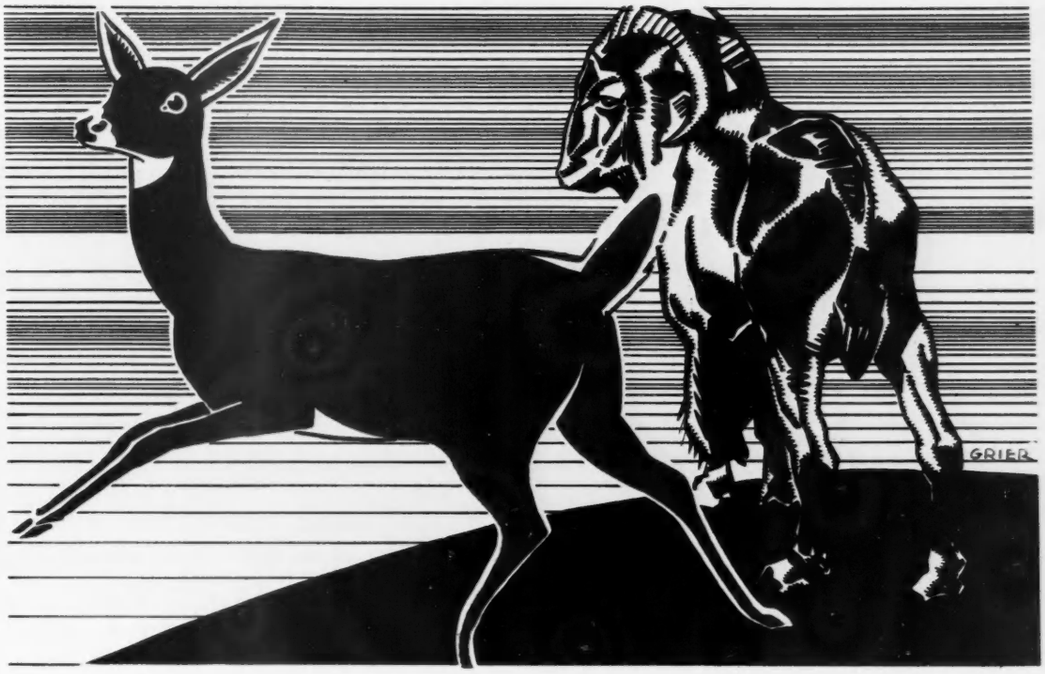

Tractive Effort—
How to Compute
and to apply It

A Truck Can't Climb Like a Goat and Run Like a Deer

Hill-Mounting Ability Must Be Calculated on Gear Ratio and Engine Size Chosen for Speed Requirements of Task

THE S.A.E. truck rating committee's proposal to include hill-climbing-ability in the rating of a truck has aroused new interest in a factor which was already well established. This ability is to be calculated by formula from known facts about the truck and its load—something which motor transportation engineers have been doing for years. Sometimes the answer is given in terms of tractive ability, or tractive effort, at others as the steepness of grade the vehicle can climb. In either case the basic figuring is the same.

Included in the proposal of the committee, however, is the idea of stating the maximum speed of the truck as a part of the rating and that is quite another "breed of cats." Until a few years ago it sufficed to say that a given truck with a specified load could climb a grade of so many degrees in high gear. A small engine with plenty of gear reduction could make a good showing on that basis, although in truth it may be said that hill-climbing became an ordeal which A. J. Scaife, president of the S.A.E., aptly described as "winching trucks over the hills."

Vehicle speeds on the level were kept at a low figure to save engines from destruction from excessive revs. In fact by changing the rear axle ratio a small engine could be used in a heavy duty truck. For an illustration taken at random from COMMERCIAL CAR JOURNAL Specifications Table in 1926, a four-cylinder engine of just a little more than 200 cu. in. displacement was used in a ¾-ton delivery job with a 5 1/3 to 1 ratio as well as in a 3½-ton truck with 11¾ to 1 rear axle ratio. It takes no slide rule to show that the 3½-tonner was expected to carry its load more leisurely than the delivery job powered by the same engine and, we may add, more leisurely than present-day 3½-tonners which are propelled by engines ranging in capacity from 257 cu. in. to more than 500 cu. in., and carry rear axle ratios as fast as 5.11 to 1.

To make high speed on the road, as required at present, calls for larger engines and faster rear axle ratios than those commonly used a few years ago. In selecting a truck for given operating conditions it is necessary to figure out tractive effort, or hill-climbing ability, as before, but we must at the same time take into consideration speed on the road. Consequently the tractive effort or hill-climbing ability is figured with a gear ratio and engine size that will meet the conditions imposed by the job. With a given engine and load the effect of changing rear axle ratio is to increase speed and decrease hill-climbing ability or to reduce hill-climbing ability and increase speed.

Tractive ability may be measured by weighing the pull of the truck on a drawbar or tow cable. This sort of test is usually made by a traction dynamometer which is a trailer of very short wheelbase which is towed between a truck and a load, such as another truck, or is provided with brakes to put a load on the truck being tested. On the trailer are scales to measure the pull exerted by the truck in moving the dynamometer and the extra truck, if an extra truck is used.

Field tests are out of the question, in all but a few cases, and as a substitute tractive effort is calculated. The factors needed are the torque of the engine, gear reduction in the rear axle, gear reduction in transmission if the truck is not assumed to be operating in high gear, the efficiency of the transmission of power from engine to point of tire contact with the

ground, and the actual radius of the tire.

Tractive ability, or effort, as it is frequently given, is calculated from these facts. The simplest formula is

$$TE = \frac{T \times R \times E}{r}$$

where TE = tractive effort
T = engine torque in inch pounds
R = gear reduction, engine to rear wheels
E = efficiency
r = rolling radius of tire in inches.

If torque is given in foot pounds as in COMMERCIAL CAR JOURNAL Specifications Table, instead of inch pounds, the figure must be multiplied by 12, because the rolling radius of the tire is given in inches, rather than feet. The formula then becomes

$$TE = \frac{T \times 12 \times R \times E}{r}$$

Applying this formula to a truck which has an engine with maximum torque of 150 lb. ft., rear axle reduction of 6.5 : 1 and 32 x 6 tire with rolling radius of 16.65 in. and assuming efficiency of 90 per cent we have

$$TE = \frac{150 \times 12 \times 6.5 \times .90}{16.65} = 634.$$

The overall efficiency figure is simply an allowance for the difference between the listed, or calculated, engine torque and the torque actually applied to the driving wheels. In these calculations it is assumed that all the power is applied through one wheel and that the tire is able to transmit this power. Actually we must give thought to traction, weight distribution and other factors but in figuring ability by formula we use a theoretical driving wheel.

The loss in torque, or power, is made up of several different items. We know that no gearing is perfect and that some power is lost every time drive is taken through a pair of gears; universal joints consume a little power under load, turning the rear axle differential and shafts around takes energy. One factory estimates an efficiency of 96 per cent for the drive line and rear axle which means that if the engine develops 100 ft. lb. of torque 96 ft. lb. will be delivered to the wheels.

Another allowance is made for engine accessories such as fan, pump and generator if torque and horsepower are given without accessories and, for good measure, a percentage is tacked on to take care of the fact that all engines are not always in perfect condition and adjustment.

Efficiency figures have been set at different figures by transportation engineers and factories. Austin M. Wolf, in an S. A. E. Transportation Meeting paper, suggested 85 per cent in high gear and 75 per cent in indirect gears; one factory deducts 15 per cent from engine torque and, as mentioned previously, figures 96 per cent of this figure; another factory bases all of its calculations on 80 per cent efficiency. The S. A. E. committee's formula establishes efficiency at 90 per cent.

Although tractive effort or drawbar pull is used for comparison, it suffers from the drawback that it does not take into account gross weight of the chassis nor the surface on which it is operating. The formula would apply to a light delivery car powered by a 500 hp. engine, if such a freak could be built, but we know that such a job would not make a good tractor for a semi-trailer despite the fancy drawbar-pull figure which the formula would give it. Likewise the formula would grant a truck running in soft sand the same pulling ability as one on concrete.

A practical way of comparing tractive effort of different trucks is on the basis of tractive effort per pound of vehicle gross weight. This is done by putting gross vehicle weight (GVW) in the formula, as part of the denominator. The formula then becomes

$$TF = \frac{T \times 12 \times R \times E}{r \times GVW}$$

in which TF = Tractive factor = traffic effort per lb. of vehicle gross weight.

Those who have followed the S. A. E. truck rating committee's work will recognize in this formula a part of the grade ability formula approved by the committee at its January meeting. The S. A. E. formula carries the calculation a step further by expressing the tractive factor in terms of hill-climbing ability. This means that the surface over which the truck operates is taken into consideration. There are, of course, two factors to consider, grade and road surface.

The S. A. E. formula gives the answer in per cent of grade which the truck can climb in high gear and takes care of the road surface factor by assuming an excellent road. Experience has shown that the pull required to move a truck over smooth, level concrete, or similar roads, is of the order of 30 lb. per ton of gross vehicle weight. Therefore the S. A. E. committee fixed the rolling resistance as 1.5 lb. per 100 lb. of vehicle gross weight.

With this background of information we may look upon the S. A. E. grade ability formula as a simple and effective way of calculating the hill-climbing ability of a truck. None of its proponents claims that it is accurate to the final degree but it is accurate enough for all practical purposes.

As it now stands, awaiting final approval, the S. A. E. formula is
Per cent grade =

$$100\left(\frac{T \times 12 \times E \times R}{r \times GVW}\right) - RF$$

Note that the part within the parenthesis is the TF formula noted previously. The 100 is placed in the formula for convenience so the answer will come out as per cent grade directly and RF, the rolling friction or road resistance, is given as 0.015 lb. per lb. of gross vehicle weight for the same reason.

Substituting figures from the truck chosen as an example in the previous case, and assuming a gross vehicle weight, we have:
Per cent grade =

$$100\left(\frac{150 \times 12 \times .90 \times 6.5}{11.65 \times 13{,}500}\right) - .015 = 3.2$$

When calculating hill-climbing ability for an actual truck on a specified job the actual torque developed by the engine is the figure to use. This torque can be taken off a torque curve supplied by the manufacturer or the maximum figure may be found in COMMERCIAL CAR JOURNAL Specifications Table.

For purposes of rating trucks the S. A. E. formula calculates torque from piston displacement rather than from published torque figures. True it is that there is a difference between the torque output of different engines of the same piston displacement, but the S. A. E. committee recommends its factor as "a fair average value." The factor is based upon the assumption that an engine will develop .625 ft. lb. of torque for each cubic inch of piston displacement. (The general average is .637.)

Be Sure That Dr(iver) Jekyll Isn't a Chronic Monster Hyde

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to have trouble at some time or another. In his effort to compensate the lack of physical vigor he shoots out of a parking area into the path of a moving vehicle. This type, of course, is somewhat different from those suffering from extreme timidity but results are the same. The person who lacks confidence is likely to have trouble. Experience will help many persons of this nature if they have not begun to drive too late in life. The employer should examine such applicants very carefully before assigning them for duty in heavy traffic.

The "Insane" Driver

Insanity is a matter of degree. Several types of insanity come on gradually and may cause the person to show very poor judgment at times. One of these types is paresis. It is an after-effect of syphilis and usually becomes very obvious in the later stages. A good physical examination will help to reveal the symptoms of troublesome cases of this type.

Drivers With "Nerves"

In this research two age groups were found to be accident-prone. The older man who is losing out physically tends to compensate by added momentum of his powerful car. Another type is the driver whose blood pressure goes up and who finds that he cannot manipulate well. He becomes nervous

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AFTER HOURS

Let's Have Fairness!

◆The railroads and their prejudiced friends, you probably have noticed in the public prints, are intensely devoted these days to the goddess (or god, it doesn't matter which) Fairness. In their appeals to the public, their sole quest, as they put it, is for fair treatment; that they have equality of treatment with all other agencies of transportation; that they be permitted to engage in any other form of transportation.

It is to be hoped, devoutly, that this devotion to a worthy principle will continue.

The point is brought up at this time because there seems to be a tendency to interpret fairness as meaning that railroads, in order to retrieve lost business, should be permitted to establish truck lines wheresoever they wish, and to compete on a cut-throat basis with existing certificated truck lines.

If this be fairness, what is injustice?

Is it fair to expose men who recognized the truck's utility and whose operations are meeting the specific requirements of public convenience and necessity to the merciless competition of railroads that paid no attention to the motor truck until its competitive effects were felt?

Is it fair, no matter what the present plight of the railroads, to permit them to wage a destructive trucking war with truck lines that have been duly certificated, have invested heavily in equipment, and staked their all on their faith in the motor truck as a public utility performing services which no other transportation agency could duplicate?

Is it fair to permit railroads to do to truck lines what they are not permitted to do to each other?

Isn't it fair to suppose that state regulatory commissions which were given jurisdiction over motor trucks to protect them from themselves should do everything in their power to protect them from unscrupulous railroads?

The railroads should of course be given every opportunity to engage in any other form of transportation—but

Is one to assume that it will be fair if they do so over the dead bodies of the existing certificated motor carriers?

These are questions that truck operators must not lose sight of. They must find the answers which will serve to protect them from their foes and guarantee them a decent livelihood from a worthy pursuit.

Roosevelt and Railroads

◆When the text of Governor Franklin D. Roosevelt's address on the railroad problem reached us we studied it carefully to see where the Democratic nominee stood with regard to motor trucks. In doing this we had no political motives. We simply did what every editor should do when an important public official addresses himself to the more important public.

Our first reading of the speech must have been hurried because we saw nothing in it that might be termed dangerous to highway transportation. But you should have seen us scurry to a studious reading when we read a *Railway Age* editorial which said: "Governor Roosevelt's discussion plainly implied the necessity of withdrawing all subsidies from carriers by highway" and "Not in years has any public man discussed the transportation problem with more intelligence and courage than did Governor Roosevelt."

So we read the speech again, and we studied it and we pondered, and still we found no cause for alarm. We even found some pro-truck statements, which caused us to suspect that Mr. Roosevelt and his advisers had imitated the famous Wickersham Commission and its prohibition report, which the wets and drys found equally favorable to their cause.

We found the following declarations, which we prefer to interpret as the Democratic nominee's recognition that there is a place in modern transportation for motor trucks as well as for railroads:

" . . . the Interstate Commerce Commission should be relieved of requiring competition where traffic is insufficient to support competing lines, recognizing, of course, the clear and absolute responsibility for protecting the public against any abuses of monopolistic power. Likewise, I believe the elimination of non-paying mileage should be encouraged wherever the transportation needs of the community affected can be otherwise adequately met."

"Where rail service should be supplemented with motor service to promote the public interest, the railroads should be permitted in this manner to extend their transportation facilities. Indeed, they should be encouraged to modernize and adapt their plant to the new needs of a changing world."

"We must pay the fair cost of . . . transportation, which is in truth a tiny fraction of the selling price of commodities. But we can not burden our producers or restrict their markets by excessive costs of transportation. So the constant improvement in the economy and efficiency of transportation is a matter of ever-present national concern. Under stimulus of good times and under pressure of hard times much has been done in the way of this improvement. More can be done."

We cite these excerpts simply to show that, in our opinion, the Governor has provided himself with enough verbal springboards to enable him to leap, after the votes are all in and counted, in the

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A Word to Fleet Men

◆There are fleet managers in this country who have, we dare say, saved their employers hundreds and hundreds of thousands of dollars in maintenance and operation expenses. Their efforts have greatly prolonged the usefulness of truck equipment originally purchased.

Observation has shown that this type of fleet manager emphasizes maintenance to the almost complete exclusion of modernization. He seems to be entirely possessed by the idea that the old trucks must be kept running no matter what the truck industry does to develop more economical and efficient transportation.

This is where, it seems to us, the fleet manager lets himself wide open to criticism from his superiors. It may be a long time in coming, but sooner or later the management is going to become conscious of the antiquated equipment that represents the company on city streets and highways. Then will arise the inevitable question: Yes, we know that we are saving so much in the maintenance and operation of these old trucks *but* how much is it costing us to be so poorly advertised to the public? How much in lost good will; public acceptance?

And when that question is popped the guilty fleet manager will be out on a limb with nowhere to drop but in the ranks of the unemployed—*and* his reputation will follow him wherever he goes.

His best bet is at all times to maintain a proper balance. Even if new trucks are not being purchased, he must be on record as recommending their acquisition for the very reasons that will be hurled at him if he doesn't.

All of which points the moral that he who is off balance, falls when pushed.

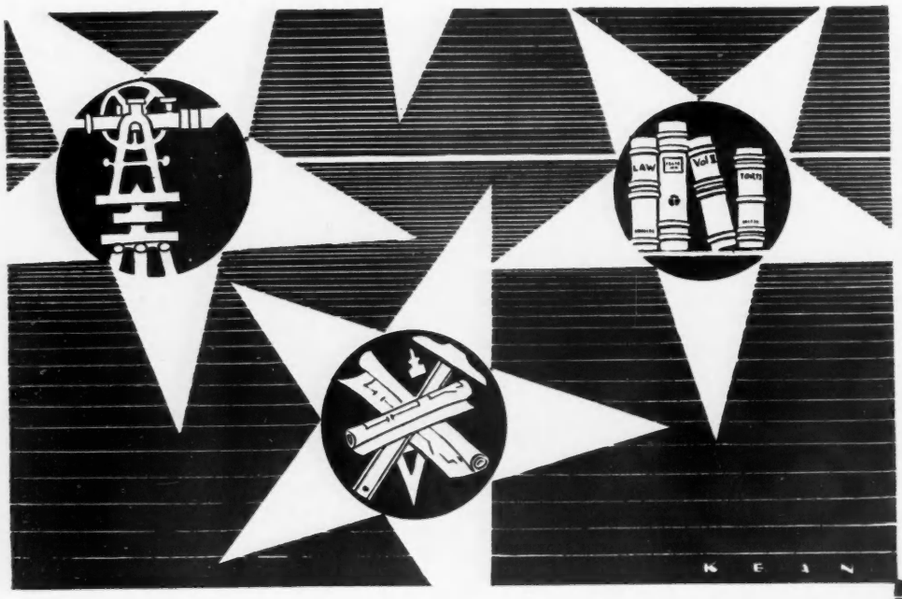
On the Spot

◆If the large investors in railroad securities were readers of Commercial Car Journal we would now be wondering, egotistically, to what extent our last month's editorial influenced their formation of the Calvin Coolidge Commission to inquire into the management of railroads. If you don't remember, we suggested that "it would be a wholesome thing for railroad transportation if the brotherhoods and the investors were to turn their critical faculties to play on railroad management with the same enthusiasm that is being expended" in attacking motor trucks.

Anyway we hope the commission gets at the whole truth. Our expectation is that the highway transportation viewpoint will be amply represented on the investigating body. Alexander Legge is president of the International Harvester Co., and Alfred E. (Happy Warrior) Smith learned about trucks from the U. S. Trucking Co. of New York City.

And of course the truck industry has nothing to fear at the hands of such broad-minded and highly intelligent men as Mr. Coolidge, Bernard Baruch and Clark Howell, Jr., who complete the commission.—G. T. H.

Fleet Management Rates Place Among Professions



Recognition and Rate of Pay of Fleet Managers Are Out of Line With Knowledge and Ability Demanded of Them

By Clinton Brettell

Supt. of Garages,
R. H. Macy & Co., N. Y. C.

THIS subject, discussed occasionally behind closed doors, but persistently kept out of print, is one that is of the greatest moment, not only to the individuals engaged in its pursuits, but even more so to every official who guides the destinies of those large organizations employing great fleets of motor vehicles in the conduct of their business, many of whom have as yet failed to grasp its fullest realization.

That this condition should exist is not difficult to understand, when consideration is given to the rapid growth of the industry, necessitating the closest application to the "mechanics" of the job by those engaged in it, without much time for thought of its recognition as a highly skilled profession and the publicizing of that concept.

Be that as it may, it is unquestionably a fact that the general lack of this realization on the part of high company officials has resulted in the loss to those companies of a very considerable portion of the inherent capabilities of their transportation departments. And as a natural consequence, the recognition and compensation of the Transportation Executive has been far below his potential value to the organization.

To realize that this is so, we need only study the organization chart, to find how far removed is the transportation executive from the higher officials and how devious and involved is the line of contact.

Or let us search out his physical location in the plant, and where do we frequently find him—tucked away in an obscure corner, or buried in the ground in some subterranean passage.

Consider even the government branch of this business, and where do we find motor transport? Subordinated to the Quartermaster-General, whose principal job is "The Service of Supply." True, during the World War—its real import was glimpsed, and for that period we had a "Motor Transport Corps" under a General Officer.

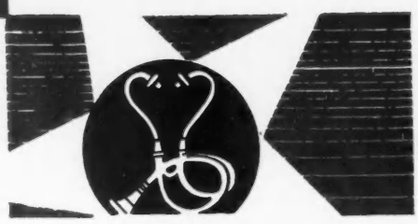
All of the above merely emphasizes the fact that there is no general realization of the vastness of the proposition and the important part it is destined to play in modern industry.

It will be a profession of the highest standing—ultimately—why not now?

And that brings us to the point of the Transportation Executive—what must be his qualifications and training—in order to fit into this picture to its fullest extent?

Categorically, we might list those qualifications as follows:

- Mechanical Aptitude—Technical Training
- Automotive Practical Experience
- Analytical, Accounting, and Statistical Ability and Training
- Purchasing and Legal Knowledge
- Plant Layout and Construction Training
- Executive and Sales Ability—Leadership
- Knowledge of Economics
- Production Ability
- Personal Characteristics—
  - Health and Vigor
  - Initiative, Industry, Forcefulness
  - Diplomacy—Tact—Cooperation
  - Integrity
  - Loyalty.



To explain these qualifications briefly—let us consider them in the order listed.

It goes without saying that unless the individual has an aptitude and liking for things mechanical, he can never be a success in such an undertaking.

Technical Training of the highest degree and broadest scope is imperative—when it is realized that probably 50 per cent of the executives' time is spent in considering technical problems, the importance of this item needs no further argument. The problems with which he will be confronted from time to time cover the field of: mechanics, strength and testing of materials, chemistry, physics, electricity, metallurgy, thermodynamics (combustion, fuels, etc.), lubrication, to name just a few of the more important ones.

Of course, he cannot and need not be as expert in any branch as a specialist would be, but must have a thorough grasp of the entire field, so he can separate the "grain from the chaff" in the various matters that are continually being presented to him.

Whether this technical training is acquired rapidly, by an intensive and carefully planned course in a

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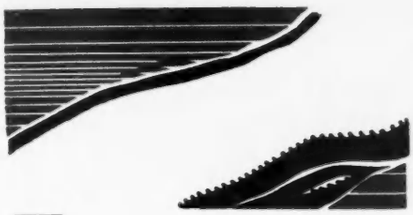
N. E. L. A.'s Large Fleet System Makes Cost-Matching Easy

Twelve Forms Are Used in the System Which Is Based on S.A.E. Standard Classification of 21 Accounts

This is the third instalment of a series of articles on cost accounting, cost keeping and cost systems recommended by various manufacturers and associations.



THIS is the third of three cost plans recommended by the National Electric Light Association in its Motor Vehicle Cost Accounting Classification. It is designed for large-sized fleets or by operators desiring various degrees of cost segregation. The first two plans, for small and medium sized fleets, were presented together with reproductions of forms in the September issue, page 33.

Costs developed under any of the three plans will be comparable with those developed under either of the other two. For that reason general adoption will permit dependable ready comparison of results with other fleet operations using any of the three plans. All three plans are based upon and include all the elements of the uniform system of classifying charges arising from the operation of motor vehicles developed by the Society of Automotive Engineers.

Plan C is recommended to all operators with but few exceptions. It supplies complete operating cost data, statistics and information that can be readily applied to increase fleet efficiencies and lower costs. The standard S.A.E. classification, containing 21 accounts, is used with this plan. Twelve forms are used, some of which were published in connection with the first two plans in the September issue, page 33. When forms in this, the third plan, duplicate those employed in the first two plans, reference will be made to the previous issue.

Form B-1. Motor Vehicle Daily Report (see September issue, page 36). It may also be used for each trip made with pooled trucks. Procedure is the same as outlined under Plan B.

Form C-1. Motor Vehicle Monthly Report, an 8½ x 13-in. sheet, can be used instead of Form B-1 in cases where a monthly report of vehicle use is more desirable. Provides all information except vehicle defects, for which a separate small form should be used. Can be used when a vehicle is permanently assigned to a certain department or district. At the end of the month it is forwarded to the accounting department, which charges to the various accounts or work orders.

Form B-2. Garage Employee's Time Report (see September issue, page 36).

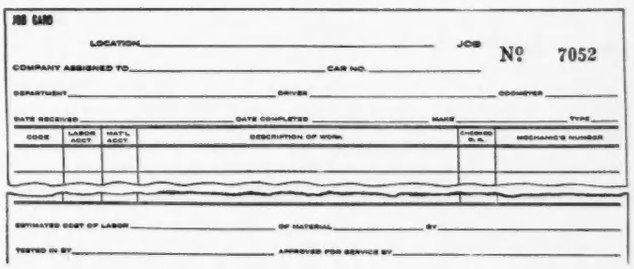
Form C-2. Garage Employee's Time Report, a 5 x 8-in. card, is used with electric time clocks. It is perforated, the top portion being used by the payroll department and the lower by vehicle cost accountants, thus imposing no delays on the payroll department in the receipt of employees' time records.

Form B-3. Material Used Report (see September issue, page 36).

Form C-3. Repair Shop Job Card, an 8½ x 11-in. card, is necessary for the proper issuance of instructions to mechanics on each vehicle. While the front of the form shows the work to be done, the back shows the cost. The back is used as a ledger sheet to which is posted the labor and material used in making the repairs to the vehicle.

Form B-4. Auto Tire Record (see September issue, page 36).

Form C-4. Tire Change Tag is a


JOB CARD

LOCATION _____ JOB Nº 7052

COMPANY ASSIGNED TO _____ CAR NO. _____

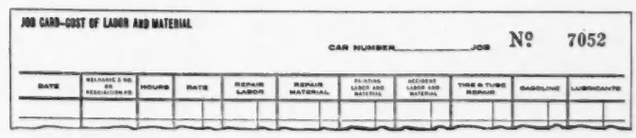
DEPARTMENT _____ DRIVER _____ ODOMETER _____

DATE RECEIVED _____ DATE COMPLETED _____ MAKE _____ TYPE _____

CODE	LABOR ACCT	MAT'L ACCT	DESCRIPTION OF WORK	CHECKED O. K.	MECHANIC'S NUMBER

ESTIMATED COST OF LABOR _____ OF MATERIAL _____ BY _____

TESTED IN BY _____ APPROVED FOR SERVICE BY _____


JOB CARD—COST OF LABOR AND MATERIAL

CAR NUMBER _____ JOB Nº 7052

DATE	REFERENCE S. NO. OR REQUISITION NO.	HOURS	RATE	REPAIR LABOR	REPAIR MATERIAL	PAINTING LABOR AND MATERIAL	ACCIDENT LABOR AND MATERIAL	TIRE & TUBE REPAIR	GASOLINE	LUBRICANTS

Form C-3—Repair shop job card (front and back)

5¼ x 2½-in. linen shipping tag. Lower portion filled in and sent to the tire record clerk when a tire is placed on a vehicle. Upper half is wired to valve stem with tire number, make, size and vehicle number filled in with ink. When placed in service on the vehicle, information provided for is completed, tag attached to tire removed and returned to garage. Both portions are posted to the Auto Tire Record, Form B-4.

Form B-5. Garage Daily Filling Report (see September issue, page 36).

Stock Record. For stock room operation, a perpetual inventory should be maintained, for which purpose many standard forms are available.

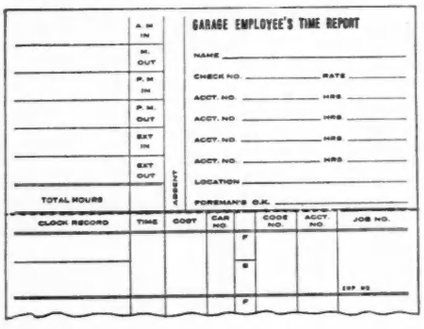
Form C-5. Monthly Report of Oil, Anti-freeze or Gasoline is a 17 x 11 in. worksheet and shows quarts or gallons used daily by each vehicle for an entire month. This form is used to summarize the daily charges for gasoline, oil and anti-freeze which appear on Form B-5. The monthly summary is posted to Form C-6 in total for the month instead of daily. However, these supplies can be posted daily direct to Form C-6, Form B-5 and outside bills, if considered preferable.

Form C-6. Detail Motor Vehicle Costs—Monthly. This is a 17 x 11-in. cost accounting work sheet to accumulate individual monthly vehicle costs for posting to Form C-7. Form C-6 is used to accumulate the daily variable and fixed operating costs for each individual vehicle so that monthly costs can be obtained. It provides for additional information such as driver's wages, original cost, present value and mileage features for the month and accumulated mileage.

Form C-7. Motor Vehicle Cost Report is also a 17 x 11-in. sheet. It is an individual vehicle inventory and history or life record. Shows purchase data assignment, essential information for license purposes and a transcription of two year costs, data and statistics. Space is provided on back for record of major repairs, overhauls or unit replacements. To this form is posted the monthly costs, mileage, hours, data and other statistics from Form C-6 so that the figures of cost and performance can be accumulated for each vehicle from date of purchase. It shows all essential data for the entire life of each vehicle. The sheet provides a record of two-year operation of each vehicle and accumulated figures must be brought forward to a new sheet after that time. Individual vehicle information is transcribed monthly from this form to Form C-8.

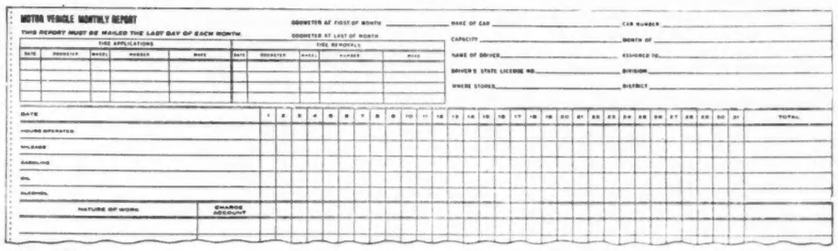
Form C-8. Motor Vehicle Cost Report. This is a double 17 x 11-in. monthly report of fleet operations by individual vehicles, which should be grouped by makes and types. The form is used to summarize operating costs and performance data of individual vehicles to determine the total operating costs of the entire fleet. The left half shows costs in total dollars and the right half vital statistics and unit costs. The latter are used for economy comparisons and for establishing equitable rates for use of the transportation equipment.

The National Electric Light Association, 420 Lexington Avenue, New York City, will gladly furnish copies of its "Uniform Motor Vehicle Operating Cost Classifications," which contains a complete outline of the three plans, to all interested readers at a very nominal price.

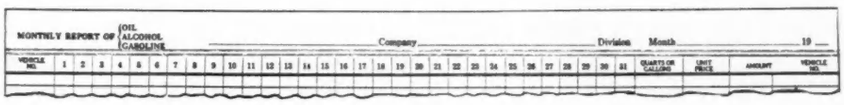


Form C-2

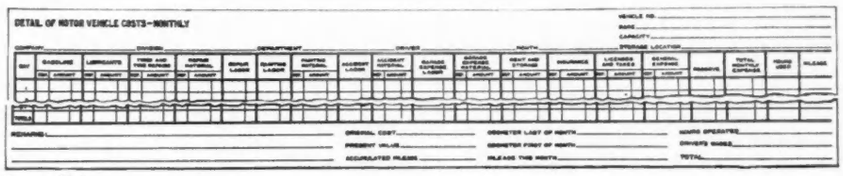
Form C-4 (front and back)



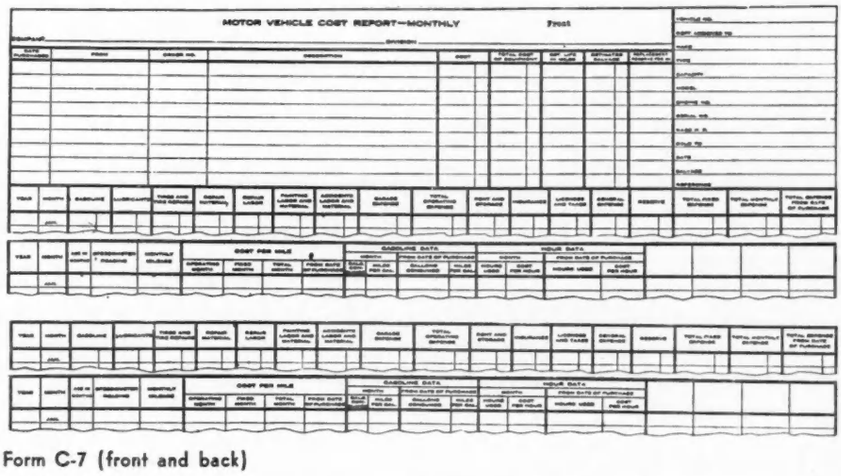
Form C-1



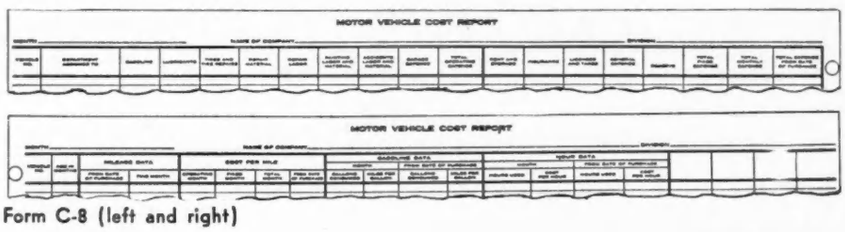
Form C-5



Form C-6



Form C-7 (front and back)



Form C-8 (left and right)

Our Own Ear to the Ground Department

We're Getting Warmer

A couple of months ago this column referred to "needle bearing" universal joints as used on some passenger cars today and suggested that someone ought to look into the situation for trucks. Well, we don't claim that we're responsible, but we've found out now that as soon as next month a manufacturer of units for trucks is going to offer a joint of this kind to manufacturers and possibly for replacement installation.

Learned About Clutches From Them

The truck men are stealing a march on the passenger car manufacturers. Plenty of automobiles now have vacuum operated automatic clutches, but now there seems to be good reason to believe that someone may adopt a mechanically operated clutch.

From "Clutch" to "Engagement"

One trouble with automatic vacuum operation controlled by the accelerator is that the rate of engagement can't be controlled by the operator. In mechanical clutches the driver has more control and can therefore get a smoother engagement.

Any Others?

Twin Coach is already using automatic clutches, we believe, on their coaches, and we wouldn't be surprised to see other truck makers in the field before the passenger car fellows get around to it.

Let's Be Friends

We're willing to gamble those stock certificates which our bank is still holding as collateral that the announcements of the White-Studebaker and International Harvester-Willys-Overland deals aren't the end of tie-ups between truck companies and automobile factories.

Not Necessarily Mergers

As a matter of fact we'd be almost betting on a sure thing in one way, if we put it that some companies who have not up to the present built trucks, will be building one-half ton or 1-ton commercial jobs in the near future, either for sale direct or through the dealers of truck producers.

A Hot Tip

There is one company we have in mind particularly, whose name we can't mention, that is developing jobs along that line. And to show how serious the management is, it has hired the former sales manager of one of the biggest truck producers in the country to help in the development work.

We're the Lucky Thirteenth

We can't mention his name either, and there aren't more than a dozen men outside of the particular company who know he is working for the concern.

Cuts Tooling Cost

Of course you never can tell what may turn up, but at least it's not in the cards so far. The idea, of course, is that I. H. C. needs a good and really low-priced half-tonner, and a passenger car company such as Willys has the production facilities and the high production rate to make low prices on various units possible.

Depends on Dealer Stocks

An exclusive truck manufacturer in the Detroit territory has a complete new line which has been almost ready for a while. It ought to be out in not more than 60 days, and possibly in half of that time.—A.F.D.

These Men Want Jobs

Biell, G. Edward. (53), 111 Oak St., Grosse Pt. Farms, Mich. Twenty-three years experience in truck and passenger car selling and distribution. Record as follows: seven years Hupmobile Michigan distributor, three years Republic Michigan distributor, seven years branch manager of Federal Truck at St. Louis, Mo., and three years salesman and territory representative. References. Will locate anywhere.

Durkee, Ellsworth L. (36), 949 Stuyvesant Ave., Irvington, N. J. Sixteen years experience in truck field. General Motor Truck Co. in New York City in capacities ranging from mechanic's helper to assistant manager of parts. Experienced in handling inventory records, stock control systems and all paper-work connected therewith. Knows parts sales promotion and has had considerable dealer and truck, bus and taxicab fleet operation contact. National Motors Mfg. Co., Irvington, N. J., as parts manager, installing new parts numbering and control systems. Available at any time and will go anywhere. Married, one boy. References.

Earle, John H. (47), Quaker Neck, Chestertown, Maryland. Wide experience in automotive promotion, advertising, sales, service, engineering and production. Record follows: 1930-25—general sales manager Fuller & Sons, comprehensive knowledge of transmission and clutches, traveled widely in trade; 1925-23—Eastern sales manager for Fuller, established intimate acquaintance with engineers and manufacturers; 1923-22—sales manager Huck Axle Co., increased contacts, handled advertising; 1921—general superintendent Parish & Bingham Co., Cleveland, charge of entire plant of 1000 men, designed and installed modern heat treating plant; 1921-19—manager Detroit plant, Parish Mfg. Co., coordinated sales production, purchasing and accounting departments, built modern plant addition, extended contacts with Mid-West manufacturers; 1919-17—Major, Coast Artillery Corps, U. S. Army, 12 months in France; 1917-14—sales engineer and estimator for Parish Mfg. Co., knows pressed steel practice, modern shop operation, steels, tools, jigs, dies, etc.; 1913-12—sold Federal and Standard trucks in New York City; 1912-11—operated own sales agency in Washington for Oakland cars and Hupp-Yeats electrics; 1911-10—designer, Packard; 1909-08—designer, Chalmers, and 1908, graduated from the United States Naval Academy. Services immediately available. Will go anywhere.

Roller, George E. (36), 200 Fairbank Rd., Riverside, Ill. Familiar with all phases of truck design, sales and use. Experience in retail and wholesale sales, fleet account sales and sales promotion and advertising. Capable of supervising fleet operation. Twelve years experience—three with White and nine with Diamond T. Technical education, graduate U. S. School of Military Aeronautics and pilot during World War. Can locate anywhere.

Fleet Operators

Hallman, Edward. (34), 818 George St., Lancaster, Pa. Desires position with factory or fleet operator as inspector or trouble man or in a selling capacity representing shop equipment or parts. Experience: Chief Machinist Mate, U. S. N. (3 yrs.); motor mechanic, Bell Telephone of Penna. (2 yrs.); mechanic, Phila. Garford Truck (2 yrs.); motor mechanic, General Baking Co. (1½ yrs.); traveling truck inspector, Railway Express Agency (last 8 yrs.). Will go anywhere. References.

Pearson, Ray, 3726 N. Sacramento Ave., Chicago, Ill. Desires position in mechanical or supervisory capacity with fleet operator. Twelve years experience with all makes of trucks and cars. Had charge of 95-unit fleet of Jefferson Ice Co., Chicago; 25-unit fleet of Rusetos Ice Cream Co., Milwaukee, and a fleet of buses for the Depot Motor Bus Co.

Roosevelt and Railroads

Continued from page 25

direction of sanity and public interest.

And personally we believe the truck has sufficiently proved its value as an efficient and economical agency of transportation not to be ignored by either of the distinguished gentlemen seeking the Presidency.

It is in the halls of petty politics—State Legislatures—that the truck has most to fear. There is much less to fear in Congress, if we are to judge by the sound, untrammeled reasoning of a man like Senator Couzens, who disagrees with some of the Democratic nominee's pronouncements on page 16.

THE OVERLOAD

And You'll Thank Us

If you are a fleet manager and you happen to be in or passing through Philadelphia, you will be the loser if you do not stop and call on F. C. Fiechter, manager of the John Wanamaker fleet. You'll find a welcome; you'll find him interesting; you'll find him remarkably well-informed; you'll find that he has an answer to every fleet problem, and you'll find that his answers have a practical origin.

The Eats Are Treats

And if you want a real meal, Mr. Fiechter knows the right places. And, by all means, let him do the ordering.

Who'll Bid More Miles?

No. 14 is a Pierce-Arrow truck owned by Ira Wilson & Sons, Detroit, that has covered 900,000 miles. No. 14 is 12 years old. Her daily chore consists of a mere 240 miles carrying 1200 gal. of milk on her back and hauling two 1200 gal. trailers—and this is seven days in the week, no time off, no rest.

Ed Loomis Writes:

"I am feeling great and can move about with all the grace of an elephant with three broken legs. The procedure is to use two people, preferably of medium height, for crutches and a third one in front carries my left limb. The fourth wheel of this vehicle is my right leg, and it goes all right if not more than one of the units loses its balance at the same time. P.S.—Your famous undated letter sent in care of 'red-headed night nurse' just about took the prize for my summer collection."

At a Luncheon, Besides

The S.A.E. invited your editor to speak five minutes on "The Economies of Oil Reclaiming" at the annual transportation meeting in Toronto. The laugh here is that it has taken us weeks to get together all the evidence. Moreover, if we can sell oil reclaiming in five minutes we will feel slighted if the oil reclaimer manufacturers don't bid against one another for our services. The answer, of course, is that while we'll give the S.A.E. a five-minute summary, we'll have at least four splendid articles left over for Commercial Car Journal. So look for them.

Will It Be Windy, Too?

The S.A.E. will hold the 1933 transportation meeting in Chicago. This is a decided break for the boys who otherwise would not get to the Exposition.

Joe Cook Coos With Us

Between jobs Joe Cook (not the four Hawaiians) dropped in on us and helped us enjoyably to discuss away a few hours. Joe left Indiana Motors Corp. as sales manager, dropped in on us and went on to New York to sign up with Brockway.

Read 'Em and Write

The "Our Industry Needs Leaders—Not Drivers," article got a fine rise out of leaders. We'll begin publishing them in the November issue if S.A.E. transportation meeting discussions don't take up too much space. If you haven't yet written in your comments do so now and at the same time don't overlook to say something about "Does Our Industry Need a Dictator?" See page 14.

Don't Blame Us

If in looking through the Specifications Table you see a compression ratio of 17:1 for the Cummins Diesel engine, don't accuse us or the monotype operator of a mistake. Several readers and a proofreader questioned it, but it isn't a mistake. Ratios run high on Diesels.—G.T.H.

How Carriers Can Attract And Develop More Business

Carefully Planned Programs of Mail and Personal Solicitation Are Necessary to Lure More Freight Into Trucks

By G. Lloyd Wilson

This is the ninth instalment of a series on Motor Carrier Problems.

THE gentle art of luring freight into the motor vehicle bodies to be transported over the highways is known as traffic solicitation. It is an undeveloped art so far as many motor freight transportation carriers are concerned despite the unquestionable fact that huge quantities of freight traffic of kinds which formerly moved by railroad, steamship or railway express service are now transported by motor truck. This statement sounds so much like a paradox that explanation is in order.

A great deal of the increased freight traffic now handled with greater or less enjoyment and profit by motor freight carriers has been attracted to motor carriers because of the attractive character of the services offered by the motor carriers; by the more liberal interpretation of the terms and conditions of transportation by motor carriers than the interpretation of these terms and conditions of their older and more conservative competitors; by the practice of rate cutting pursued, not so wisely, but too well by many motor freight lines, and by the relatively unattractive service and rates of other types of carriers.

Freight traffic cannot be said, in many, but not all cases, to have been solicited or developed by motor freight carriers; but rather to have been diverted to the motor carriers by the force of circumstances which in many cases were not controlled by the motor freight transportation lines.

If the freight traffic of many motor freight lines were analyzed it would be discovered that most of the traffic came to the motor carrier because of one or several of the following factors:

1. Low rates, often so low that they fail to cover adequately the cost of operation, fixed charges, risks and a fair return upon the reasonable value of the property used in transportation service.

2. Lax classification of goods. The elaborate division of goods into many different rate classes by railroads and steamship lines may be criticized as being so technical and over-refined that it frightens some traffic away from these carriers. On the other hand, it is equally true that many motor transportation companies have attracted high-grade freight which is fragile as well as valuable by quoting rates upon either an inadequate system of classification or upon no basis of classification at all. Freight should be divided for rate-making purposes into as many classes or groups as are required to reflect adequately real differences in the value of the goods, the relative costs of handling the different kinds of shipment, their commercial characteristics, their value, and the risks of transporting them.

3. Overly liberal claim payment practices. Many motor freight carriers pay claims for loss, damage or delay with superficial investigation into the merits of the claims upon the theory that the payment of the claim is necessary to retain the good will of the shipper or consignee. This is not to be interpreted as a glorification of the technicalities with which the claim practice and procedure of other carriers has sometimes become encrusted nor an exaltation of the traditional "hard-boiled" claim agent. It is, however, correctly to be interpreted as a condemnation of a "soft-boiled" freight claim policy in which claims are paid because the carrier has not the courage to resist being imposed upon by certain unscrupulous claimants. The vast majority of shippers and consignees are honest (that may be believed even by one who long since has ceased to believe in Santa Claus), but claims should be paid only after investigation has disclosed that the loss, damage or delay actually caused loss, and that the loss was suffered by

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Railway Agency Truck Plan Spells Awakening of a Giant

Interstate Over-the-Road Hauling Operation in Midwest Will Help Recover Lost Traffic, Officials Believe

By R. E. Plimpton

WITH the inauguration, on the night of Aug. 22, of interstate routes between Milwaukee and Chicago, and South Bend and Chicago, one of our largest city truck operators for the first time has entered the motor-freight field. Through a new subsidiary, known as Railway Express Motor Transport, Inc., a merchandise freight service over the highways is tied in with the local collection and delivery given by the parent Railway Express Agency, Inc.

On the surface the industries and business houses in our second largest metropolitan area now are getting one more means of shipping merchandise between Chicago and a few important points, less than one hundred miles away, in Wisconsin and Indiana. Truck lines, boat lines, steam railroads, electric railroads—all these are offering many different kinds of rates and service in the effort to share in the available traffic. Why then should the Express Agency enter such a highly competitive field? What is the bearing of its new operation on the trucking business in general?

Official sources furnish an inkling of what may be expected, should the truck routes prove successful. An announcement issued by L. O. Head, Chicago, vice-president of the Express Agency, indicates that the service is in the nature of an experiment. In the beginning at least, only interstate business will be handled. Shippers will welcome, we are told, "a truck line sponsored by an experienced, reliable and dependable concern."

In this initial venture the Agency is testing up-to-date highway equipment, as well as experimenting with a novel form of service. Four tractors, each of a different make, have been purchased. New aluminum bodies have been specially constructed. Three of these units will fill the schedule. The trucks leave points of origin at 7.30 p.m. or later, so that shipments may be received any time during business hours for next morning delivery at destination. Details of rates are shown in accompanying tables. Rates are quoted, it will be noted, between Milwaukee and South Bend, and the connections at Chicago are such as to permit overnight shipments between the northern and eastern ends of the routes.

These rates are taken from Tariff No. 1, issued by R. B. Smith, superintendent of traffic, Chicago, for Railway Express Motor Transport, Inc. This includes, in two printed pages, all the rules, regulations, classification, for the new service. Some fifty items (books, house furnishings, clothing, dry goods, radios and cabinets, lamps) are listed as taking first class rates. Food products, iron and steel articles, paints, batteries, are among the twenty-five articles to which third-class rates apply. Flat rates varying from 10 to 25 cents apiece are charged for the return of empty containers, such as ice cream cans, laundry baskets, etc., but everything else accepted for shipment comes in the second class. Following the practice of motor freight lines, the Agency places in the "not acceptable" group such items as

live stock, certain dangerous articles, heavy or bulky freight which require special loading or unloading apparatus. Articles in one piece or package must not exceed 17 ft. 6 in. length, 6 ft. 3 in. height and 6 ft. 11 in. width.

The classification used in Tariff No. 1 differs in many respects from that followed for less-carload rail shipments. On that account, the rates cannot be compared directly, at least on any broad scale. Certain kinds of furniture, listed as first class in the truck tariff, would be rated at higher than first class when shipped by rail. Iron and steel products, which come in the lowest (third) class in the truck tariff, might be placed in lower than fourth class as less-carload rail shipments.

Considering first-class rates alone, Tariff No. 1 is slightly higher (from 3 to 5 cents per hundred pounds) than less-carload rail rates in the territory, for such hauls as South Bend to Chicago, Milwaukee to Chicago, and South Bend to Milwaukee. For shorter hauls, as Chicago to Gary and to Kenosha, there appears to be little difference in the truck and rail rates.

A pick-up and delivery service, by trucks of the Express Agency, is offered to ground floors of business premises within corporate limits of the points listed in the truck tariff. No extra charge is made for delivery. For pick-up service, 10 cents a hundred pounds is added to the tariff rates, with a minimum of 50 cents for each shipment. This results in a minimum charge of $1.50 per shipment when it is picked up, as compared with $1.00 when delivery service only is given. There is no additional charge for picking up shipments of 1000 lb. or more. Truck or trailer loads, minimum weight 20,000 lb., will be handled at "special rates," the truck tariff states.

The receipt of Railway Motor Transport, Inc., is not negotiable, according to its tariff. Any shipment, the delivery of which is conditional upon the surrender of the original receipt at the time of delivery, will not be accepted. C.O.D. shipments may be at the company's option. Charges for this service (collecting and remitting) are at the rate of ½ of one per cent, minimum charge 17 cents.

A valuation clause similar to that used by the Express Agency provides that the rates named apply only when the declared value does not exceed $50 for any shipment of 100 lb. or less, or 50 cents a pound for heavier shipments. For each $100 or fraction in excess of the value just mentioned, the charges are increased 10 cents.

Packing requirements are simple, in Tariff No. 1. They are specified in a single sentence: "All shipments must be so prepared or packed as to insure safe transportation with ordinary care on the part of the carrier."

The possibility of interchanging shipments with other carriers is recognized in a provision: "Charges directly incidental to the transportation of shipments on which this company receives a haul may be advanced to connecting railway, express, boat, stage

Milwaukee, Chicago, South Bend Route of Railroad Motor Transport, Inc.

and truck lines or storage warehouses, but only when in the estimation of the company's agent the shipment is worth in excess of the transportation and other charges at forced sale."

So much for the interstate truck routes the Agency has just started. To gain a broader conception of the situation, and of its national implications, we must turn to the uniform agreement governing the relations between the Class I steam railroads and their wholly and jointly owned facility—the Express Agency. Certain details of truck operation by either party are expressly covered. Before the Agency can engage in trucking of property which could otherwise be transported on the trains of its rail owners, the consent of the railroads actually involved must be obtained. This consent can later be withdrawn, but only after six months' notice.

The rail carriers seem to reserve all rights as to truck operation, according to the terms of the agreement. They may use the trucks when and where they please, even to the extent of providing pick-up and delivery in terminal areas—the stronghold in the past of Express Agency truck service.

Because of these features of the uniform contract, the Chicago motor-freight experiment indicates the approval and cooperation of all the Class I steam railroads whose traffic is affected. These include among the eastern carriers, the New York Central, Pennsylvania, Erie, Pere Marquette and Nickel Plate; also two of the important western systems, the Chicago & Northwestern and the Chicago, Milwaukee, St. Paul and Pacific. Each one of these lines has interests in trunk or bus operation, as a separate concern, not to mention the fact that they are recorded as owning more than one-third of all the Express Agency capital stock.

The head of the Chicago & Northwestern has given us an illuminating insight into what the Agency may become. In his annual report (made public a few weeks before the Agency motor-freight plans were announced), President F. W. Sargent voiced the idea that it should serve as a giant nation-wide subsidiary of all the railroads. He is quoted:

"Buses and trucks are here to stay. They have a particular function in the transportation field. The railroads should extend the operation of the Railway Express Agency to make that organization a truly highway and terminal subsidiary. It should handle all less-than-carload freight; render highway service where useful and more economical than by rail; perform all transfer services and terminal operations in larger cities, not only for less-than-carload freight but in many instances for carload freight, and act as a freight forwarding company."

Apart from giving service to its rail owners, the Express Agency has some good reasons, thirty million dollars' worth in fact, for earning a fair return on its investment. At least when the Agency took over the American Railway Express Company, the deal involved eight millions for land, a million and one-half for materials and supplies, and nearly twenty-one millions for buildings and equipment. This was three years ago, and the total given in 1931 financial report for property and equipment is $28,000,000.

Even before the Agency was organized the earnings of American Railway Express Company had been falling off. Operating revenue from domestic express, which represents well over 95 per cent of total revenue, was reported as slightly under 334 million dollars in 1920, while for 1931 it was close to 192 million dollars, or a reduction of more than 40 per cent.

The traffic lost is largely of the short-haul variety, although the long-haul business has felt the influence of the motor truck, and to some extent of parcels post and expedited rail freight services. Intrastate traffic of the Agency decreased 36 per cent from 1921 to 1929, while during the same time interstate traffic (mostly long-haul) fell off only 9 per cent.

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INTERSTATE RATES ISSUED BY RAILWAY EXPRESS MOTOR TRANSPORT, INC.

In Cents per Hundred Pounds

AND

Between	Chicago, Ill.			Evanston, Ill.			Waukegan, Ill.			Kenosha, Wis.			Racine, Wis.			Milwaukee, Wis.		
	Class			Class			Class			Class			Class			Class		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Chicago, Ill	..	..	..	..	..	..	..	..	..	50	42	35	53	45	37	58	50	41
Evanston, Ill.	..	..	..	..	..	..	..	..	..	44	37	31	47	41	33	56	47	40
Waukegan Ill.	..	..	..	..	..	..	..	..	..	37	32	26	41	34	29	47	41	33
Gary, Ind.	41	34	29	43	36	30	44	37	31	50	42	35	53	45	37	58	50	41
Hammond, Ind.	37	32	26	43	36	30	44	37	31	50	42	35	53	45	37	58	50	41
Michigan City.	50	42	35	53	45	37	59	51	42	64	54	45	66	56	46	70	59	50
South Bend	59	51	42	62	53	43	68	58	48	70	59	50	73	62	51	77	66	54

Engineers Intensify Worship of Gasoline Engine Shrine

CONTINUED FROM PAGE 22

difficulty because instead of forcing gasoline and air mixture into the cylinder when the piston is at the botton an excess of pure air is blown in to clear out the exhaust. Liquid fuel is then injected at the proper point. Another variation about which engineers are thinking is injecting gasoline into a two-cycle engine and igniting it by spark as in the conventional four-cycle engine. This permits a pure air scavenging as in the two-cycle Diesel. Injecting gasoline into the cylinder, or even into an intake pipe, instead of using a carburetor is another expedient no longer visionary Some remarkable results have been obtained in tests on airplane engines, and there is a lot of experimenting with this idea.

Not the least of the advantages of injecting gasoline is that fuel can be put into the cylinder at any desired time, and this makes it possible to lap the valve timing or do a lot of other tricks in timing which are impossible when a gasoline air mixture is taken into the cylinder.

New alloys give engineers a chance to do things which were impossible when cast iron and steel of not too certain characteristics were the engineer's working materials. Tests of special alloy valve seats and valves which gave better than 75,000 miles operation without even a carbon and valve job led one engineer to suggest that engines could be built which required practically no attention until a general overhaul at 75,000 to 100,000 miles. It is reported that one manufacturer told his engineering staff that he wanted an engine which could operate 50,000 miles without even minor adjustments. The project was suspended because of business conditions, but the thinking about it has continued.

The thought of still higher compression ratios intrigues many engineers. With a background of experience with high compression engines and the distribution of premium fuels, they are thinking of commercial application of compression ratio now used in racing cars. Right well they know this is no development to be wrought overnight. It reflects, however, the frame of mind of engineers who are looking at every possible line for improving and perfecting gasoline engines.

Allied with but not necessarily coupled with this extra high compression idea is the question of supercharging. Gar Wood's exploits with Miss America X in which the horsepower of individual engines was raised beyond ordinary limits by raising compression and adding "blowers" have put the subject on the front pages of newspapers and revived interest on the part of engineers. Several years ago it was suggested that superchargers be put on truck engines and driven by clutches so that they could be turned on only when a burst of power was required. More than one engineer in these days believes that superchargers, if used, will be kept in action all the time. Hence they are thinking of direct-connected superchargers.

Lubrication of engines has gone a long distance since the time when passenger car owners set drip feed oilers to the proper number of drops per minute in each of a dozen or so oil feed gage glasses. Stepping up engine power and speed and lengthening periods of full throttle operation have put a terrific responsibility upon the engine lubrication system. Some engineers believe that we are asking entirely too much of a few quarts of oil and that the remedy is not oil coolers alone. They are thinking of dry sump lubrication, a system in which there is no oil in the bottom of the crankcase. An extra pump takes oil from the crankcase and pumps it to a reservoir, either in the engine or elsewhere on the chassis, from which place it flows to a regular engine oil pump. With this design engine oil capacity readily can be increased to several gallons. There will be a considerable cooling effect from circulation of the oil through pipes and in the reservoir, and, if desired, extra cooling can be effected by a conventional water-oil heat exchanger or by jacketing the reservoir with water. A further step proposed is that of providing a settling chamber in or near the reservoir and a thermostatically controlled heating element, thereby providing means of removing sediment and dilution.

So much for the supply of oil through the engine oil lines—but this is not all. At present the amount of oil allowed to pass through main and connecting rod bearings is limited, to a certain extent, by the danger of over-oiling the cylinders and fouling the spark plugs. Possibly the quantity of oil passing through a bearing will be multiplied several times if some special means is used to control the amount of oil which reaches the cylinder wall. Thin sheet metal plates with slots that permitted the connecting rod to move were used between crankcases and detachable cylinder blocks some years ago to prevent over-oiling of certain engines. This is an illustration of one way of controlling cylinder wall lubrication.

Six Stroke Cycles?

Cycles of two strokes and four strokes are not the only ones available to gasoline engine designers. A modification of the Otto four-stroke cycle is the Schwarze in which air is forced into the cylinder against pressure. Several experimental six-stroke cycle engines have been built. In one, designed in England, a super rich mixture is taken into the cylinder and fired as in a four-cycle engine, but the exhaust valve does not open at the end of the firing stroke. Combustion stops because of lack of air, and during what would be the exhaust stroke but actually is a recompression stroke air is forced into the cylinder. The new mixture of air and partly burned charge is then fired by a spark near top dead center. From this point the cycle of combustion, exhaust, intake and compression continue as in the four-stroke cycle.

Rivals there are for the gasoline engine, but it is no deserted idol they seek to overthrow. An engineer of international repute and a stanch advocate of the gasoline engine informally threw down this challenge: "The engineers who think the gasoline engine is through are kidding themselves. We are a long way from being through. A lot can be done to the gasoline engine and we are doing a lot. We will show them a lot of new tricks. In fact, in spite of all the years spent in developing the gasoline engine, we have just started."

How Carriers Can Attract and Develop More Business

CONTINUED FROM PAGE 30

the claimant to the extent indicated by the claim.

4. Lax packing and shipping requirements. Again it is not necessary to defend the packing, marking and shipping requirements of other carriers, and certainly it is not desirable that motor carriers adopt these practices. When miscellaneous freight is accepted for transportation in less-than-truckload lots it is necessary that the motor carriers require the goods to be packed so as to withstand the ordinary hazards incident to loading, transportation on the road, transfer from truck to platform and from platform to truck, and unloading. Many motor carriers in their misguided zeal to get traffic, accept goods in inadequate containers, and pay for their folly in claims for loss or damage.

These and other reasons account for a great deal of the volume of traffic attracted to motor carriers, and for the unfortunate financial condition of not a few motor freight transportation companies. They have attracted freight not wisely but too well.

How, then, can and should motor freight transportation companies set about attracting an adequate volume of attractive and remunerative freight traffic? Can it be done? Is there any way of competing for freight in a hard, practical world without straining points, relaxing requirements, and slashing rates?

In the first place the solicitation efforts of motor freight carriers should commence *before* the first piece of equipment is purchased and before the service is organized. The first step is a thorough traffic survey conducted by someone whose judgment is influenced by what he finds and not by what he wishes to find. The business-producing possibilities of the district or route proposed to be served should be examined as a placer miner pans the creek gravel for pay-dirt. The volume of traffic moved by other car-

TURN TO PAGE 60, PLEASE

N.Y.C. Forges Dollars

Money and Labor-Saving Methods Employed in Two Departments of New York's Central Motor Repair Shop

A Dozen More Clever Ideas From the World's Largest Salvage Shop

FORGE SHOP

Surface Plate
Press on Surface Plate
Bronze Welding Brake Shoes
Closing Shoe Rivet Holes
Welding Transmission Cases
Aluminum Welding
Reclaiming Wheels

ENGINE SHOP

Flywheel Housing Tools
Boring Cylinder Sleeves
Camshaft Bearing Cutter
Main Bearing Screw Hole Jig
Magneto Bracket Drill Jig

THIS is the second of a series of articles describing the shop-made devices used to save time and labor in salvage operations as well as routine repair work in the Central Motor Repair Shop Building in New York City, the largest fleet maintenance building in the world.

Shops of three departments are housed in the building, and this information is presented through the courtesy of Albert Goldman, Commissioner, Department of Plant and Structures; Dr. William Schroeder, Jr., Chairman of the Sanitary Commission of the Department of Sanitation, and Edward P. Mulrooney, Commissioner, Police Department.

Devices shown in this article are, like those in the September issue, devoted largely to salvage. The first section describes the Forge Shop, Department of Sanitation, the second the Engine Shop of the same department.

FROM SALVAGED PARTS

Forge Shop
Department of Sanitation

A forge shop, Department of Sanitation, which is located on the 8th floor, performs a wide variety of welding and straightening for salvaging parts. In many instances, salvaging is completed by machine work in other departments. The shop contains many shop-made devices to assist in the salvage operations.

Fig. 14. Press on Surface Plate

A surface plate, 3 in. thick which is used for straightening and welding, is equipped with screws and head from a Barnes press. The screws are fastened by holes bored through the plate, near one end.

The press ram is used to hold parts in position, as well as apply pressure for straightening. A chain hoist is placed directly above the surface plate. Hand chain is shown in the photograph looped around the ram.

Fig. 15. Surface Plate

Another heavy surface plate mounted on a wooden stand is used as a large anvil for straightening bumpers, rods, etc. It is made of a plate 3 in. thick. The illustration shows three men straightening a truck front bumper.

Fig. 16. Welding

Both gas and electric welding are used in salvage operations. Bronze welding is used to reclaim brake shoes, the ends of internal shoes (a) are built up by bronze welding and are then ground in another department. See Fig. 8 under the heading Machine Shop, page 25, September issue. External brake shoes are reclaimed by bronze welding worn rivet holes (b).

Another example of bronze welding is that on a truck transmission case (c) in which a hole in the side near one end of the case, caused by a broken gear, is filled up. An example of aluminum welding to save a part is given in (d).

Fig. 17. Wheels

Cast steel wheels which are worn in bores or bearing cups are saved for further use by bronze welding a ring of metal around each bore, as shown in photograph and they are then machined to dimension in machine shop.

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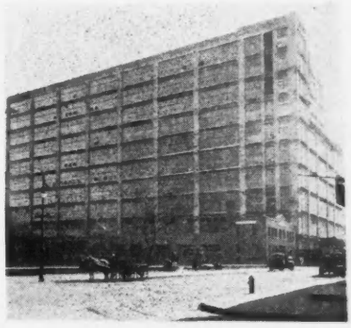

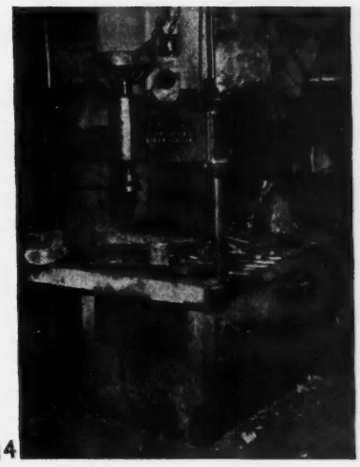

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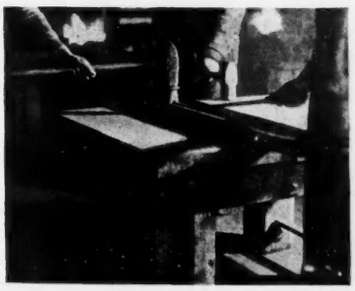

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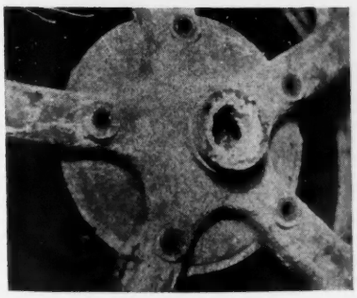

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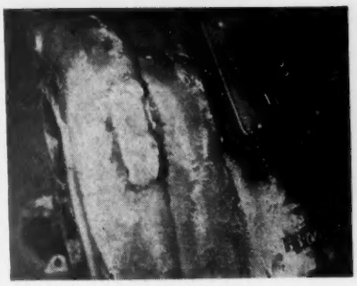

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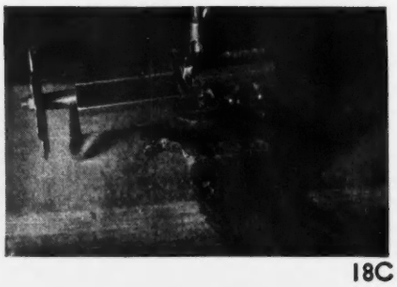

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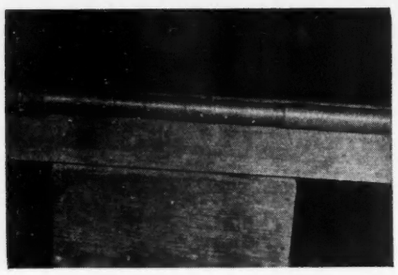

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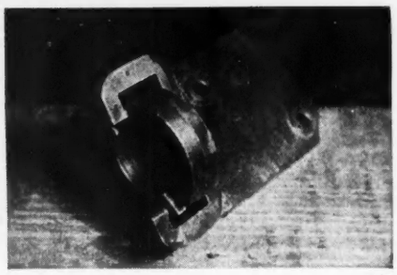

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Engine Shop
Department of Sanitation

Special tool room of the engine shop contains a valuable assortment of special tools, most of which are devoted to salvage work.

Fig. 18. Flywheel Housing Tools

Flywheel housings are trued by lathe tools slide devices mounted on special brackets. The bracket a is a simple plate with a piece at right angles and an extension serving as a handle. The two tool supports and slides which are shown in b and c may be interchangeably mounted on the bracket. After tool is set in position the shop-made star wheel provides the necessary cross feed.

Fig. 19. Cylinder Sleeve

Replaceable cylinder sleeves which are intended to obviate reboring of engine cylinders, are reclaimed in the engine department at a cost of approximately $1.50 each, which shows a considerable saving over cost of new sleeves.

Sleeves are bored to standard oversizes by placing them in position in an old cylinder block and then machining with a cylinder reboring machine. Cylinders are allowed to accumulate for a while and are reclaimed in lots of about 10, an arrangement which saves time.

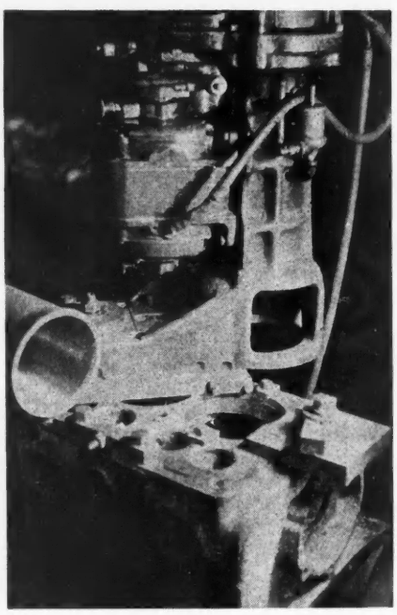

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Fig. 20. Camshaft Bearing

A special boring bar was made in the shop for boring center camshaft bearings in White GK engines. The bar is located by front and rear bearings and is fed across the center bearing. This operation was difficult until the special boring bar was made.

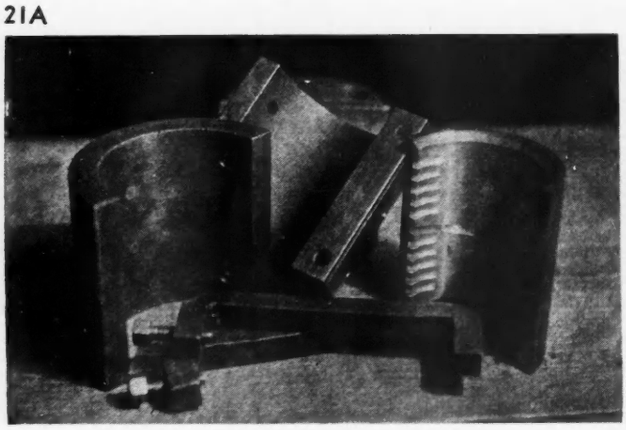
Fig. 21. Main Bearing Screw Hole Jig

Boring of holes in main bearing shells for Pierce-Arrow engines has been greatly simplified by use of a jig which holds the shells in position as in the engine. The jig comprises two half-round sections and two clamps, as shown in a. With shells in position, the jig is assembled as in b and screw holes are drilled from the outside.

Fig. 22. Magneto Bracket Drill Jig

Difficulty in properly placing holes for dowels on magneto brackets on American-LaFrance engines has been overcome by use of a drill gage, shown in photo. The front end is a reproduction of the magneto coupling. It is placed in line with the other half of the coupling on the magneto driveshaft and is held in position by the C-shaped clamp. Holes are then drilled through the steel bushings in the bracket.

21A



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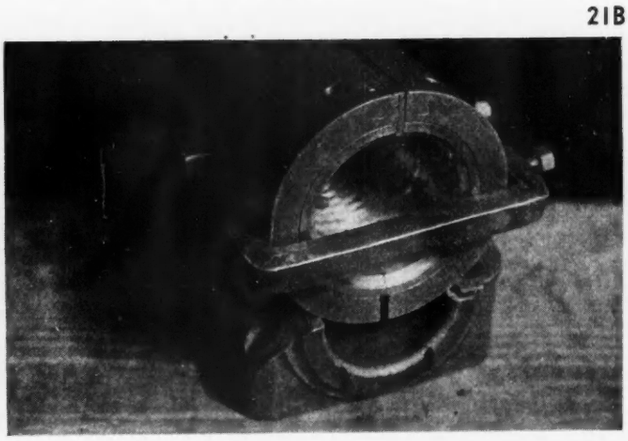


Streamlined Trailers Give Gales the Slip

CONTINUED FROM PAGE 21

creases the carrying capacity of the tank by the amount carried in the rounded extension. The rear end of the truck tank, considered by itself, shows a type of streamlining which more than one engineer believes will be used in the near future.

The round-nose type of semi-trailer body which represents a step in the direction of streamlining is becoming more popular. It possesses advantages irrespective of its effect upon wind resistance in the opinion of several engineers. Mr. S. A. Griggs, Detroit Trailer & Machine Co., says that the round-nose body "looks better than the other type," and W. G. Retzlaff, sales engineer GMT, believes that "streamlining from an advertising angle no doubt will prove an advantage due to its novel appearance." John Walker, Mack, suggests that most customers are more interested in appearance than in wind resistance, but both go together, because "a good-looking job has to have a certain amount of streamlining anyway, or it would not be a good-looking job."

Rounding the front end of a body of rectangular section, such as freight and van bodies, makes possible shorter coupling and overall length, better turning radius and distribution of weight. Or, considering the design from another angle, the round nose adds a semi-cylinder to the cargo space without increasing the overall length of the body. With a given fifth-wheel location this construction provides additional load on the tractor, inasmuch as the space is all forward of the king pin. See diagram Fig. 4.

Advantages of the round end for adding to cargo space are upheld by Joseph Lilla, Gustav Schaefer Wagon Co., Cleveland, and by John Walker, engineer special equipment, Mack. Others do not rate the value of this space highly because one side is curved and therefore not of proper shape for handling general freight in square or rectangular packages.

Many operators and engineers question the wind resistance reducing ability of a round nose without rear streamlining. A true streamline form requires a tapered tail, and in airplane sections the shape of the after part is usually considered more important than the front. However, a trailer body does not always operate head on to the air flow as does an airplane; conditions during a cross or quartering wind are quite different. In any event the front cannot be entirely neglected, because, as Mr. Herbert C. Winter, consulting engineer, Briggs Mfg. Co., said during the summer meeting of the S.A.E., "The statement that the rear portion of the object needs more attention than the front has been, very possibly, overemphasized. It is more important to have no sudden or discontinuous changes in the curvature of the forward surface. * * * * If the smooth flow is disturbed on the forward portion of the blunt-nose streamlined body, there is nothing that can be done to the rear to correct this effect."

Evidence in favor of rounding the front end without streamlining the rear end of a body is given by W. V. Casgrain, Mechanical Handling Systems, Inc., Detroit, who reports that "tests have shown a considerable saving in gasoline and the small additional cost is easily justified." And Mr. C. H. Kingham, president Kingham Trailer Co., who recommends a round body mounted as low as possible, relates that drivers report that they can pull from 1000 lb. to one ton more depending on velocity of wind.

Many passenger car drivers have complained of a "suction effect" which they feel when passing a large truck or trailer body. When the passing is in opposite directions the effect is like a sudden blast of air. During discussion of the writer's paper on trailers during the summer meeting of the S.A.E. one speaker reported that on the way to the meeting his car was drawn toward a trailer body, and the car was slowed two or three miles per hour for a moment. An engineer who travels extensively over roads on which trailers are operating states that the rush of air can be felt, but he has not noticed any swerving of his car.

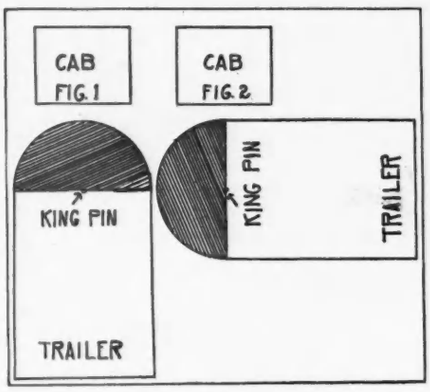


Fig. 4—Shaded area is the extra load space provided by adding a round front end to a trailer body

To break up this effect would require rear streamlining of the body, and this cannot be done without extending the body or reducing its cubic contents. Mr. I. H. Judd, engineering department, Whitehead & Kales Co., does not believe rear streamlining practical because of loss of loading space. R. B. Jones, chief engineer, Trailer Co. of America, points out that doors or tail gates at the back make it difficult to do any streamlining, and in addition overall length permitted by state laws and regulations must be considered. L. C. Allman, sales promotion manager, Freuhauf Trailer Co., who favors rounding the front end, is not in favor of changing the design of the rear end of trailer bodies, because "it would increase the length of the unit and reduce loading space. * * * * Any saving that might be made in gasoline consumption through streamlining the rear end of the trailer would not be great enough to justify the loss of loading space."

Streamlining may be used effectively in hauling units of rather radical pattern which engineers are considering. Legislative limits on length and width of trucks and of combinations have inspired more than one engineer to design a vehicle in terms of legislation rather than engineering, just as the English license tax on engine bore has encouraged the use of small-bore, long-stroke engines in that country.

Engineers are working out ways and means of providing more cubic feet of load space within the area on the road which laws permit a truck or truck tractor and trailer to occupy. The biggest chunk of unused space is that taken up by engine hood, and, as prophesied in the Ear to the Ground column last month, they propose to put the cab beside the engine or above it. To avoid the harsh effect of sharp corners they may round all edges and corners of the front-mounted cab, cutting down wind resistance, and at the same time making the job look better. With this construction it would be possible to move a semi-trailer body forward in relation to the tractor, work the front of the body into harmony with the cab and still have room to do a bit of streamlining on the rear of the trailer body.

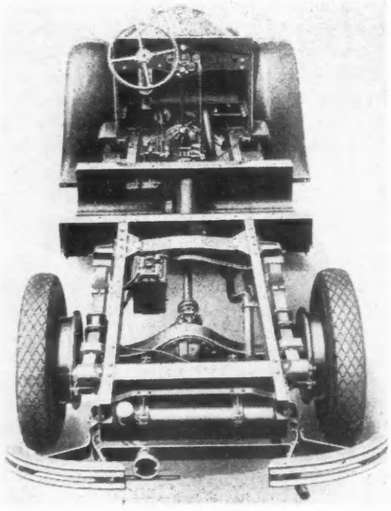
More and more streamlining is foreseen by several engineers. Mr. I. H. Judd, Whitehead & Kales Co., says: "I believe there will be more done in the next few years and more trailers sold with at least the front ends streamlined than there will be of the old square-end trailer bodies." E. A. Menhall, vice-president and general manager Highway Trailer Co., states that his company has been working on streamlining for four years and that both fleet accounts and individual owners are operating them successfully. Mr. Retzlaff predicts: "No doubt truck and trailer bodies will follow the automobile trend and the idea to create something new will no doubt stimulate the body builder into producing streamline bodies. In the future streamlining will be an important feature theoretically and will influence trailer sales." Mr. Walker, Mack, also looking into the future, observes: "We will progress as we have progressed in the last 10 years and use still higher speeds within a reasonably short time. Higher speeds now seem to be somewhat dependent on wider and straighter roads, and undoubtedly they will come too between the principal cities." Mr. W. G. Eversman, advertising manager, Reo, notes a trend toward aerodynamic lines in tractors and concludes that "lessening of wind resistance in tractors is as vitally important as in trucks or passenger cars."

I. H. C. + GRAMM + DIAMOND T

International Milk Delivery Unit Clutches By Vacuum or Hand

INTERNATIONAL HARVESTER has just entered the door-to-door delivery field with a new unit designated as Model M-2, with rated capacity of 1 ton. It is available with a milk delivery body or any other special type required. While many units and parts of Model M-2 are interchangeable with other International chassis, it is not a modified conventional truck. Side of the drop center frame rails are fabricated in one piece, eliminating all splicing. Height from ground to floor of driving compartment is 14¾ in., the drop being 11½ in.

The powerplant consists of a four-cylinder L-head 3⅝ x 4½-in. engine developing 39 hp. at 2400 r.p.m.



I.H.C. M-2 frequent stop unit

mounted in unit, with a 4-speed transmission, the assembly being carried in a three-point mounting with rubber cushion rear supports. A 9-in. double disk clutch may be vacuum or manually controlled as driver desires. The vacuum control provides complete automatic clutch operation, freeing the driver's left foot under any ordinary driving conditions. Accelerator pedal extends upward from the floor near the shaft tunnel. The conventional clutch pedal and hook-up are retained and may be thrown into operation by pulling out a control button on the dash.

Service brakes are of the 4-wheel mechanical type operated by a pedal, fitted with a hinge-mounted ratchet on its right side. For ordinary deceleration the pedal does not overlap the rachet, but for a parking stop the pedal and ratchet are depressed, the ratchet locking the pedal in place as a parking brake. The propeller-shaft hand brake, therefore, is used for emergencies. The rear axle is a full-floating bevel drive type having a gear ratio of 6.166:1. The rear springs are of the two-stage, semi-elliptic type, mains being 46 in. long and auxiliaries 33 in.

Standard chassis equipment includes 6.50-20 balloon tires, fenders, bumpers and a generator of the low-speed, high-charging type.

The standard milk delivery body manufactured by International Harvester is of 42-case capacity. The frame is of hardwood covered with sheets of Masonite and 20-gage sheet steel. Floor boards provide air spaces and are covered with rust-resisting sheet steel. The front door opening is 25¾ in. wide, permitting free access to driving compartment. Front doors are of the jack-knife type, and when open fold against the outside of the body toward the rear. Two doors at the rear provide a 30-in. opening for rear end loading. The driver's compartment or aisle is 25¾ x 59⅝ in. The load space is 66 7-16 x 47½ in.

Gramm Adds Diesel Trucks to Its Line

GRAMM MOTORS, INC., Delphos, Ohio, has joined the truck Diesel pioneers of the industry with a new series GWD truck chassis. The first Diesel job to be listed in COMMERCIAL CAR JOURNAL specifications table. Powered with a Cummins Diesel this new chassis is rated from 5 to 7½ tons as a truck or 10 to 15 tons as a tractor. While furnished at the standard wheelbase of 157 in. for $6,495 it is available in other wheelbases up to 240 in.

The Cummins Diesel is a six of 4⅞ x 6-in. bore and stroke, displacing 672 cu. in. and developing 125 hp. at 1800 r.p.m. The compression ratio is 17 to 1.

The chassis is developed from the present GW Model but incorporates several new items including side mounted single fuel tank of 33 gal. capacity, auxiliary transmission, cast aluminum radiator and Leece-Neville 24 volt 400 watt electric system.

Diamond T's New 1½-Tonner Hits New Record Low of $545

A NEW record low price of $545 has been established by the Diamond T Motor Car Co. for its recently announced 1½-ton Model 210SF, which is a development of its popular Model 210. It is furnished in a standard wheelbase of 135 in. for 9-ft. bodies and 158 in. for bodies up to 11 ft.

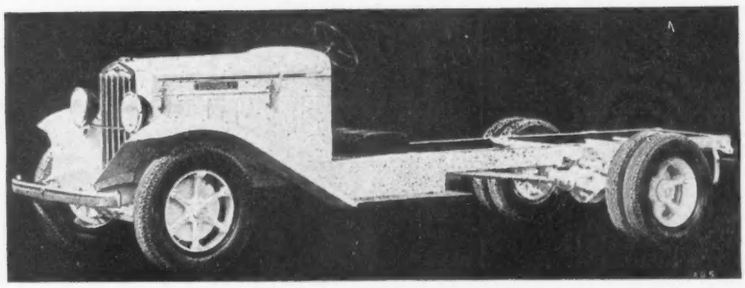
The heavy-duty construction of Model 210 is continued with the further feature of the choice of axles according to the nature of the service. With single tires the standard chassis employs a semi-floating Clark Model B364 rear axle with a gear ratio of 5.4:1. When dual tires are required the truck is built with a full-floating rear axle of similar capacity (see specifications on page 50 for details).

Continued in the new model are the Diamond T Hercules 3⅜ x 4¼-in. 60-hp. engine, four-wheel hydraulic brakes, Clark wheels and brakes, external transmission hand brake and pressed-steel frame with cross-members of the alligator-jaw type. A large-capacity, gear-driven water pump is removable as complete unit without affecting any other part of the engine. Clutch and transmission are of conventional design. A new type of flexible mounting has been adopted for the clutch plate, which is of 10-in. size, and constant mesh and third speed gears of transmission employ the involute tooth form. Rear springs are 50 in. in length and 2½ in. in width with nine leaves. A four-leaf helper spring is also provided. All the springs are carried in compression type rubber bushings and front springs are fore-shackled.

Equipment includes steel cowl, front fenders and running boards, steel spring bar bumper, electric lights, speedometer, heat indicator, battery generator, starter and horn. Hydraulic shock absorbers in front, chrome-plated bumper and a chrome-plated radiator guard of steel bars are available at extra cost.

A special de luxe all-weather steel cab has been developed for this model, which is both smart in appearance and well designed for service.

Diamond T 210SF with dual tires



REO TRUCKS + FEDERAL

Reo Rounds Out Unified Line With Two New Models

NEW heavy-duty 2-ton and 3-ton speed wagons announced by the Reo Motor Car Co. round out that company's unified line of new commercial vehicles. Reo's capacity range begins with the 1½-ton speed wagon announced a little over a year ago and extends up to the 8-cylinder 4-tonner announced in August COMMERCIAL CAR JOURNAL, the gross load capacity of which, operated as a tractor-trailer unit, is 32,000 lb. Prices begin at $625 for the standard 4-cylinder 1½-ton model, and run up to $2,995 for the standard 4-tonner. The 4-ton special tractor-trailer unit, with 8-speed transmission and air brakes, is priced at $3,645.

To power the new line of trucks now in production Reo builds four different 6-cylinder Gold Crown truck engines and one eight. Bores of the 6-cylinder engines include 3⅛, 3⅜ and 3⅝ in., with 5-in. stroke. The heavy duty Gold Crown eight has 3⅜-in. bore x 5-in. stroke. All crankshafts are counterbalanced, supported on seven bearings in the sixes, and nine bearings in the eight.

Clutches throughout the unified line are of the same dry plate construction, with diameters of 10, 11, 12 and 13 in. on the 6-cylinder models, and 11-in., double plate on the 8-cylinder job. Transmissions, except on the special eight, are all Reo-built, as are, also, front and rear axles. Cam-and-lever steering and hydraulic brakes are also standard.

The 3⅜ x 5-in. Gold Crown engine of the new heavy duty 2-tonner has a displacement of 268 cu. in. and develops 75 hp. at 2800 r.p.m. The new engine of the 3-tonner has a bore and stroke of 3⅝ x 5, giving 309 cu. in. displacement. It develops 85 hp. at 2800 r.p.m. The crankshaft of the 3⅜-in. engine is 2 5-16 in. in diameter, and that of the 3⅝-in. engine is 2⅝ in. Both are counterbalanced and supported on interchangeable type babbitt-lined bearings fitted without shims. Pistons for both of the new engines are of Lo-Ex aluminum alloy. Blocks are chrome-nickel alloy iron.

Both engines are fitted with fuel pumps and downdraft carburetors and both have cast aluminum oil pans. Clutch diameters are 12 in. on the 2-ton, and 13 in. on the 3-ton. Both transmissions provide 4 speeds.

The rear axles are of spiral bevel drive, full-floating type. Final drive ratio of 6.6:1 is standard on the 2-ton, with 5.28 and 5.83 optional. On the 3-ton, standard ratio is 7.17:1, with 5.57 and 6.5 optional. Standard brake equipment is internal hydraulic on all four wheels, with hand brake mounted behind the transmission. Hand brake on the 2-ton model is of external band type, while the 3-tonner is fitted with 14-in. disk brake.

The 2-ton model is offered in 142, 166 and 184-in. wheelbases at $1,625, $1,695 and $1,765. The 3-ton wheelbases and prices are 153-in., for tractor or dump service, 170, 185 and 205-in., at $2,035, $2,085, $2,155 and $2,230. Standard tire equipment on the 2-ton is 7.00/20, with dual rears, and on the 3-ton is 7.50/20.

Federal Door-to-Door Unit "Whoas" With One Pedal

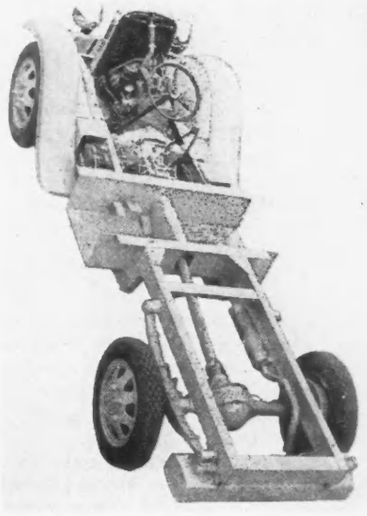
FEDERAL MOTOR TRUCK CO. has added a door-to-door type unit to its line. It is of the optional sitting or standing drive type with a folding seat and frame cut-out amidships. Interchangeability of parts with those of other Federal models is a feature of the unit, standard units being used as far as possible in the design.

Thus the engine is basically a Continental W-10, redesigned with special manifolding, carburetion, new generator, etc.; rear axles are same type as in the Federal D-3, but with a special ratio to reduce engine speed.

Federal has worked out a new system of controls. Single control is provided without the addition of vacuum or similar servo devices. There are three pedals: the one at the extreme right, a conventional accelerator; at extreme left, a clutch pedal for sitting drive and for gear shifting, and center, a combination brake and clutch pedal to which is connected an automatic engine speed regulator. Depressing the central pedal mechanically disengages the clutch, applies the brakes and throttles the engine to idling. To start, the driver releases the central pedal, which releases the brakes, lets in the clutch and speeds the engine up to the setting predetermined by a dash throttle control.

Engine speed is regulated by three throttle valves, the normal throttle actuated by a dash control and an accelerator, an upper throttle forming part of the Handy engine speed governor for maximum speed, and a third valve between these two operated by an extension on the end of the clutch pedal, which pedal is actuated by the single control pedal when the latter is being used.

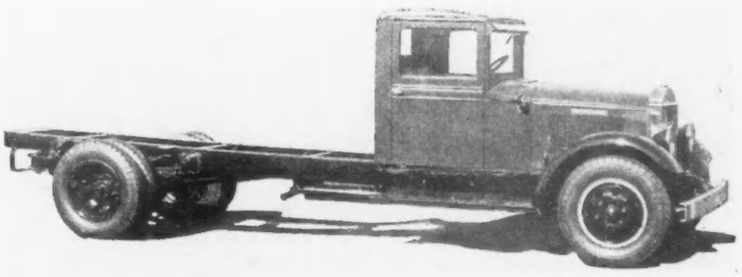
To produce good idling with this set-up the carburetor idling jet passage is continued up through a special casting between carburetor and governor to the additional throttle. Here a small spring-loaded ball check normally keeps this part of the passage closed, and the fuel mixture for idling and accelerating is supplied in the normal manner. When the engine is automatically throttled by the clutch or brake pedal the center throttle depresses the ball opening the jet and permitting mixture to enter above this valve. An equalizer or air bleed—a short exterior tube—is also provided to take care of the variation in pressure above and below the new valve.



Federal's new door-to-door unit

The generator is designed to cut in at lower speeds than is usually the case. Engine accessories include an air cleaner and Purolator. The propeller shaft "tunnel" in the dropped section of the frame is readily removable, exposing the front universal, the 4-speed transmission, 11-plate clutch, etc.

New Reo 3-ton comes in 4 wheelbases



Railway Agency Truck Plan Spells Awakening of Giant

CONTINUED FROM PAGE 32

Contrary to what might be expected, the trucking activities of the Agency have increased in scope and volume, even in the last two or three years. The present fleet, some 10,200 trucks, tractors and trailers, was increased by about 1200 units in the calendar years 1930 and 1931. Around 2400 units were purchased in the two years, so apparently 1200 units were retired.

Why this greater number or use of trucks, in the face of steadily reduced traffic? There seem to be several explanations, among them the rapid spread of highway routes for express traffic only. President Robert E. M. Cowie of the Agency refers to it as an attempt "to increase the elasticity and local extent" of the express service. He says: "In a considerable number of the large cities we are now providing an intracity service—that is, handling business between any two points in such cities, within our established vehicle limits. Special rates have been established for such service. On the other hand, we are more completely serving these and other cities by making our established collection and delivery limits coincide and in some cases go beyond the local city corporate limits. At this writing (May, 1932) we provide this service within the corporate limits of 3226 cities."

The volume of Agency trucking is also being augmented in a few cities by the hauling of merchandise between railroad freight stations, or between such stations and business premises. This is handled on a contract basis, for the rail carriers or for individual shippers. Examples are the store-door service the Agency is giving the Maine Central and other railroads in northern New England, and the Pennsylvania and Reading lines in Philadelphia, Atlantic City and nearby places. In the most ambitious scheme of this kind, started Sept. 15, Agency trucks are moving goods in carload lots, at the option of shippers, between railheads in New Jersey and business premises in New York City.

But, as mentioned in an earlier paragraph, the rail carriers are not bound in any way to use the Agency for line or terminal trucking service.

Along with these developments in terminal truck operation, there has been a rapid increase in highway services, in place of discontinued steam-passenger trains. The shrinkage in territory receiving Express Agency service is measured by the miles of steam railroad it reaches: 233,700 in 1922 compared to 215,953 miles this year. Miles of highway covered were reported as 188 and 4208 for the two years respectively.

The highway routes are now found in at least seven states—California, Ohio, Michigan, Illinois, Indiana, New York, Pennsylvania and possibly others. Express traffic and sometimes United States mail are handled, most of it moving for the longer part of the haul by rail.

Motor-freight service of the kind the Express Agency has just started in the Chicago territory has no such limitations in truck requirements or in revenue. It is easily conceivable that the Agency might expand its highway-freight activities into scores and perhaps hundreds of commercial centers where the truck is now the most widely used instrument of distribution.

Can Local Truckers Slip Off the Handcuffs Binding Them?

CONTINUED FROM PAGE 20

of secretaries. "It is out of the question," said Mr. Smith of Alabama, "to contemplate mutual relations between highway truckmen and local trucking interests. The local trucking interests will always maintain a prohibitive charge for their services."

Mr. Atherton of Oklahoma, who had gone along with Barry on all his previous recommendations, hedged somewhat on this one. "It is agreed," he stated, "that the over-paid hauler should seek the friendly cooperation of the local truck men. However, the development of the terminal system for over-road lines naturally precludes very extensive contractual arrangements between the over-road hauler and the local truck man, since under the terminal system such contracts will be made between several over-road lines and one local truck man. However, so far as possible, I consider it highly advantageous to the over-road hauler to have some working agreement with the local truck man."

Mr. Baker of Massachusetts objected because it would mean a division of profits. "In transportation there is but one profit," he contended. "Those who were in the trucking business and attempted to divide their profits as suggested are gone. The only transportation agency that can divide its profits is the railroad. This is simple for the railroad, because it can withhold dividends, float new stock or bond issues, or borrow from the Federal Government."

Mr. Horrocks thought it a good idea and it was his opinion that if this arrangement was accepted by truck terminals it would cause an increase in business and help to eliminate the hard feelings of the local trucker, who has lost the bulk of his L. C. L. hauling because of the highway hauler.

Recommendation 10. A nation-wide organization of truck owners, shippers and interests allied to trucking might be set up for the protection of truck owners, and this organization be divorced from passenger-car interests, the organization to be financed by the owners themselves, the shippers, those manufacturing products having to do with motor transport, and private carriers whose truck operations will presently be threatened.

Opinions.—The final recommendation, as was to be expected, produced a deafening chorus of approval.

"The 'truck question' will never be settled satisfactorily, nor will truckers get the proverbial 'square deal' until such an organization is existent," said Mr. Horrocks.

"Unless such concerted action is taken," declared Mr. Atherton, "a flood of hostile legislation will overrun the industry and demoralize and retard its development. I believe that leadership should emanate from the Motor Truck Division of the N.A.C.C.

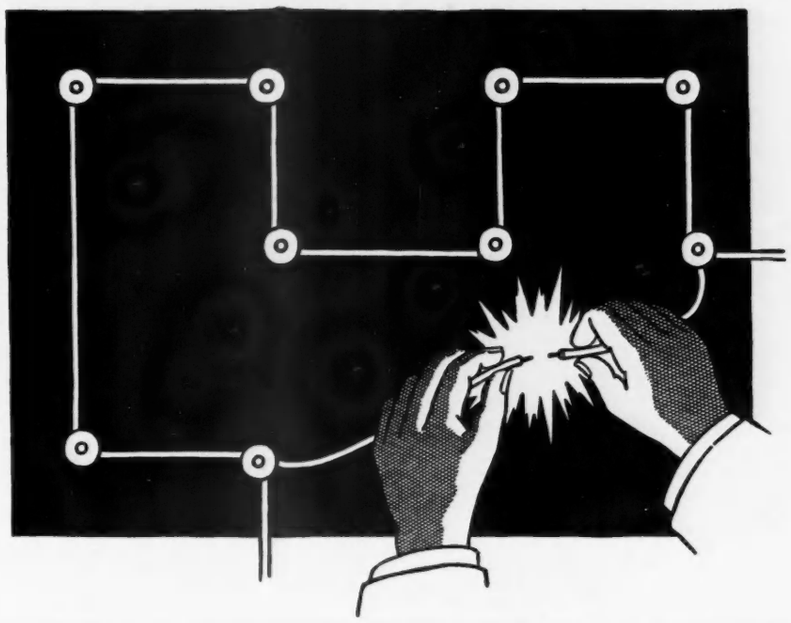
"These combined forces," in Mr. Smith's opinion, "can bring about such highway laws, regulations and city ordinances as will prohibit the railroads from choking the very life out of modern transportation."

"This," declared A. D. Way of the Motor Truck Club of New Jersey, "seems to me the most essential step in the stabilizing of the work of the truckmen hauling for hire. The whole problem is tied up in the curtailing of the one and two-truck owners who will take material anywhere, any time, at any price. The curtailment of the irresponsible truckman could be accomplished in the following manner: 1. Organization of a live national motor-truck association as suggested. 2. Refusal of truck dealers to sell trucks unless the truckman can prove financial responsibility and show the prices he is obtaining for his work are sufficient to maintain such a standard. 3. Refusal of the shippers to use the irresponsible type of operator. 4. The passage of laws by each state licensing the trucks for specific operation."

"Divorcing the passenger-car interests is good," asserted Mr. Frank.

A general comment on the local trucker versus over-the-road trucker question was advanced by W. A. Sutherland, secretary, Pennsylvania Motor Truck Association. "There is considerable business," he said, "that has naturally gone away from the local draymen owing to the long-distance hauler. I personally believe that the long-distance hauler is going to remain in the picture, so I do not see where it is possible for this business ever to return to the local expressmen."

In his conclusion (and it's a fitting conclusion to this summary) Mr. Horrocks stated: "Cartage, contract and common carrier truck lines have suffered to the same extent that other businesses have, caused by present poor conditions. This condition, of course, accentuates the need of stability. Trucking for hire, in my humble opinion, will never gain the high standard it should as a going and a necessary adjunct of our commercial life until the time arrives when it takes more than a few dollars to start out a new trucking concern, enabling it to grab the few paying tons left to the local hauler."



Short Circuit

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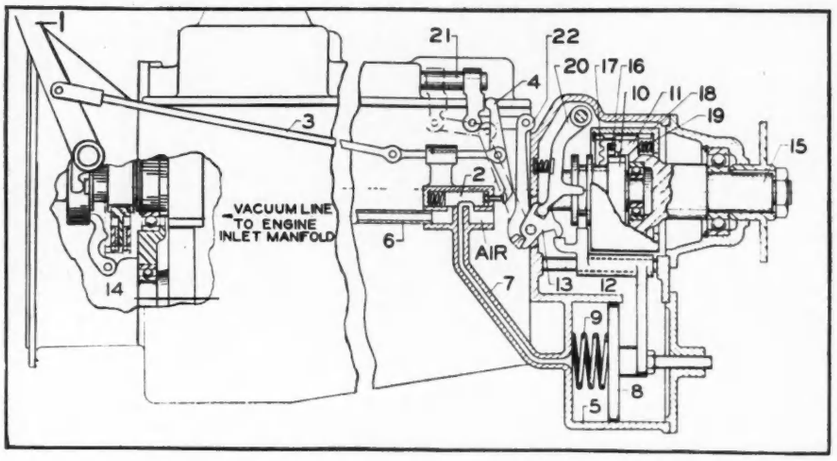
SPICER SYNCHRO SHIFT TAKES CLASH OUT OF GEAR CHANGE

Bolted at Rear of Transmission the Unit Unhooks Gear-set From Rear Axle When Clutch Is Depressed



With valve 2 closed unit is in conventional driving position

SPICER MFG. CORP. has developed a new unit for its Brown-Lipe transmissions which automatically disengages the transmission from the rear axle whenever the clutch pedal is depressed, as for gear shifting, and connects them up again when the shift has been completed. As a result, gear changes can be made quickly under any condition, without requiring perfect timing of shift, ordinarily demanded. The unit is called "synchro shift."

The unit bolts to the rear of the transmission case and contains an internal-external gear clutch operated by vacuum, a clutch brake and an overrunning clutch which makes it possible to free-wheel at will of operator.

With this combination, the transmission is disconnected at both front and rear end when the clutch is depressed and gears within the case can be slowed down or brought to a complete stop for making a shift and therefore any gear can be engaged at any time irrespective of engine or vehicle speed. It is expected that this combination will not only make shifts easier but will induce drivers to make shifts which they otherwise might avoid.

The sequence of operations in shifting can be followed from the accompanying drawing. When the main clutch pedal (1) is depressed, control valve (2), shown closed in the illustration, is opened by link (3) permitting air in line (7) to be drawn into the manifold through pipe (6), thereby moving piston (8) to the left against pressure of spring (9). This moves part (12) permitting pawl (13) to drop into the slot provided for it and locking the piston in that position.

At the same time part (12) engaging collar on the left end of part (10) moves this collar to the left, disengaging the gear clutch by pulling the teeth on (10) out of engagement with those on (11).

This action takes place during the first part of movement of the clutch pedal and continuation of that movement actuates the clutch brake (14) which slows the gears within the case. When the shift has been made the clutch pedal is released and transmission gears revolved in proportion to engine speed. The transmission, however, is still disconnected at the rear end because of the locking action of pawl (13). The driver having completed his shift steps on the accelerator and when the engine reaches the proper speed a tooth clutch at the rear is automatically reengaged and power is carried through to the propeller shaft in the usual manner.

The over-running clutch or free-wheeling unit acts to synchronize the two members of this internal-external gear clutch. This locking action is accomplished as follows. While gears are being shifted parts (10) and (16) are either standing still or moving very slowly. When the engine is accelerated a point is reached where these two parts have been brought up to the same speed as (11) and rollers lock the units together. Part (16) then moves faster than a cam member (17) and these two members tend to separate by riding up the cam faces, moving the drum (18) to the left against pressure of spring (19). This movement lets pawl out of its groove and the sliding member (12) reengages the internal-external gear clutch at (10) and (11).

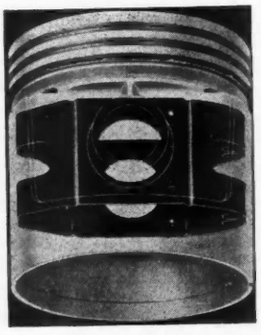
To free-wheel the driver presses down on the clutch and releases it immediately and the transmission remains disconnected at the rear as long as the engine is idling. Opening the throttle immediately reengages at synchronous speed and connection is maintained until the clutch pedal is once more depressed.

Perfect Circle Expander Restores Piston Fit

A new piston expander, for installation inside used aluminum pistons, has just been announced by the Perfect Circle Co., Hagerstown, Ind. The purpose of this device is to restore the piston to its original fit and stop piston slap.

According to the manufacturer, many thousands of miles of road work and laboratory testing went into the new device and, due to its central location inside of the piston skirt, it is said to expand the piston correctly over the entire skirt, thereby assuring full cylinder contact. Other features claimed for this expander are: it is made of finest spring steel; no machining is necessary for installation; the expander is securely locked in place by the piston pin and is unconditionally guaranteed.

The first expander to be developed is for the Model A Ford and, due to the fact that all cars do not have the same piston design, new expanders will be developed for each different kind of car.



Expander in Piston

COMMERCIAL CAR JOURNAL

NEWS

Truck Exhibit at Bottlers' Show

Conspicuous among the exhibitors at the International Exposition of American Bottlers of Carbonated Beverages to be held in Cleveland, Nov. 14 to 18, will be the following members of the truck industry: Anheuser-Busch, General Motors Truck, International Harvester, Mack-International, Weldmech Steel Products and White.

Trailer Makers Meet in Chicago

A group of trailer manufacturers from all over the United States met in Chicago late in September to form a permanent organization. The group hopes to win uniformity in state laws regulating trucks and trailers. Harvey C. Fruehauf presided.

Continental DiVco Reduces Prices

Continental DiVco Co. has reduced its milk delivery truck model H, four-cylinder, $230, to the new price of $1,295; Model K, 6-cylinder, was dropped $130 to $1,595.

F.W.D. to Build in Canada

Because of Canadian tariffs and regulations, the Four Wheel Drive Co. is now assemblying and rebuilding trucks at its Kitchener, Ont., plant, previously used only for repair work.

S.A.E. Nominates Dickinson

Hobert Cutler Dickinson, associated with the U. S. Bureau of Standards for more than 25 years, has been nominated president of the Society of Automotive Engineers.

Gotfredson Offers Diesel Truck

The Robt. Gotfredson Truck Co. announces that orders are being taken for its new Cummins-Diesel truck in 3, 5 and 7-ton capacities.

I.H.C. and Willys Combine Facilities on ½-Ton Truck

A contract, the result of several months negotiation, for manufacture by Willys-Overland of a ½-ton, six-cylinder truck in several different body types for the International Harvester Co. of America has been announced by L. A. Miller, president of Willys-Overland. George A. Ranney, vice-president, in Chicago, of International Harvester, said in a statement that his company is at present making tests on a ½-ton six-cylinder truck to be built to International Harvester specifications by the Willys-Overland Co. and that the unit will be marketed through the Harvester sales organization under its name. "For several months our engineers and those of the Willys-Overland Co. have been working on the development of a light truck to complete our motor truck line." Mr. Ranney further observed that the truck will be placed on the market as soon as the expected favorable decision is reached and as soon as new tooling equipment can be provided.

August Truck Sales

August factory sales of trucks made in the United States, according to the Bureau of Census, were 14,417, compared with 16,436 in July; 31,772 in August, 1931, and 40,450 in August, 1930.

Maine Kills Gas Tax

Maine's 4-cent gasoline tax increase proposal met with overwhelming defeat at a referendum held Sept. 12. The opposition was decisive, being 8 to 1 against the proposal.

Takes the Field

A 35.8 per cent chunk or 36,049 out of 100,564 trucks sold by 33 truck manufacturers in the first six months of this year, puts Chevrolet Motor Truck Co. well in the lead.

I.H.C. Rockford Branch

Rockford, Ill., as a result of a reorganization in the northern Illinois and northern Indiana branches of the International Harvester Co., has become a new IHC sales point for trucks. Vincent Lager, formerly of the South Bend branch, was appointed Rockford manager.

Tru-Stop Studebaker Option

Tru-Stop ventilated disk brakes can now be supplied as optional equipment on Studebaker trucks.

PERSONNEL CHANGES

✪F. L. Rockelman resigned as president and general manager of Plymouth Motors Corp. to join Continental Motors Corp. in connection with a new development to be announced in the near future.

✪C. Edward Packer, at one time technical editor of *Automobile Trade Journal*, a Chilton publication, is now publicity director of the Pennsylvania Grade Crude Oil Association.

Herrington on Way to Iraq

A. W. Herrington, president, Marmon-Herrington Co., Inc., left for Syria with Norman Nairn in connection with the new all-wheel drive truck and trailer equipment which his company designed especially for the Iraq Petroleum Co. for use in the construction of a pipe line across the Syrian desert. Mr. Nairn, it will be recalled, established several years ago the difficult motor route between Beirut and Bagdad.

Operators Form National Body

The National Association of Motor Transport Operators was formed in Indianapolis last month to organize and promote the country's trucking interest. Clinton H. Givan, attorney and former superior court judge, heads the association.

Federal Has Distributor in Milwaukee

Federal Motor Truck Co. has discontinued direct branch at Milwaukee. Otto P. Seefeld will become distributor in the territory.

Goes to Mat for Truck

The North Carolina Association of Motor Truck Owners, headed by John L. Wilkinson, president, has established a policy of consistent opposition to the railroad entering the motor truck transportation industry.

Ford Sold 130,356 Trucks

Ford sales of commercial cars and trucks in the United States for eight months, ending August, 1931, are reported by the company as being 45,857 or 35.2 per cent of the total of 130,356 units of all makes registered in that period.

Studebaker Corp. and White Motor Co. Initiate Merger Move

Plans for acquisition of the White Motor Co. by the Studebaker Corp. are under way, according to a signed statement by A. R. Erskine, president of Studebaker, and R. W. Woodruff, board chairman of White, after a meeting of both directorates. The consolidation is subject to ratification by the stockholders of each company by October 13, and if consummated will unite companies with combined assets of more than $85,000,000. Albert R. Erskine, it is indicated, will be head of the Studebaker-White interests with Frederick S. Fish as chairman of the merged company. Purchasing and distributing advantages prompted the move. Identity of the White organization as an operating unit will be preserved as will be the Studebaker, Pierce-Arrow and Rockne units.

Railroads Hold Key to a System of Super-Highways

CONTINUED FROM PAGE 17

billions of dollars necessary to do the job right are not available and because so much money cannot be invested in such an enterprise unless it promises to become self-supporting.

As a possible solution to the problem of modernization and coordination of our various means of transportation, the author offers:

Coordination of railroad and motor traffic of all kinds can be accomplished by building trestles for elevated railways and high-speed motor highways over the trunk-line railroads. This will provide rails on the ground, for the use of freight, commuting, and local accommodation traffic. The through-express passenger trains will be suspended overhead from the trestle, while its upper surface will be concreted and used as a superhighway or toll road. This highway will be, of course, a toll road.

The elevated highway will be provided with two traffic lanes in each direction, one for slow vehicles (that is, those running under 45 m.p.h.) and the other for fast vehicles with a permissible top speed of, say, 70 m.p.h. The toll highway will have an advantage for the slower as well as the faster vehicles because of greater safety, and also because it will not be necessary to slow down for crossings, traffic lights in cities, curves, etc. With all cars running in the same direction, the fast cars segregated from the slow ones, and complete absence of crossing and pedestrian traffic, it will be unquestionably possible to operate well-built automobiles at the high speeds indicated above with very much greater safety than they can be at much lower speeds on the highways of today.

At certain intervals roughly corresponding to railroad stations, special ramps will be provided for the ingress of cars to the highway and egress therefrom, the station master acting as collector of tolls at the smaller places. The problems of tunnels, bridges, etc., are secondary problems which would have to be solved individually.

A trestle railroad has been in existence at Langen, Elberfeld, in Germany, for 28 years, and has carried millions of passengers without fatal accident. Of late, several other systems have been developed, in particular, one by George Bennie in Scotland.

The suspended rail car contemplated is not of the gyroscopic type, but is hung from wheels running on rails that are suspended from the trestle. The drive may be either directly to the wheels or by means of air propellers. In tests with this latter type on the ground, speeds of the order of 125 m.p.h. have been attained, while Bennie has run trains at speeds only a trifle under 150 m.p.h.

The competitive position of railroad passenger transportation under these conditions would be substantially as follows: The rapidity of traffic and the greater frequency of train service consequent on the use of shorter trains would increase the attractiveness of railroads as a means of transportation. Even with the faster automobile traffic made possible by the super-highways, the trains would run so much faster as to offer an important advantage.

In this connection it should be emphasized that today every means of transportation with the exception of the railroads has been speeded up and is capable of a very considerable further speeding up in the near future. In so far as the present railroads are concerned, there are very definite factors limiting either the technical possibility or the economic advisability of handling passenger traffic very much faster than it is done today. To jump from the present fortuitous top rail-speed of 80 miles to regular schedules based on a speed of 125 to 150 m.p.h. is something which no railroad engineer, and particularly no railroad maintenance-of-way man, would for a moment think possible. What, then, is going to be the outcome of this situation, with the railroads as the transportation snail, past which private automobiles, buses, and airplanes whiz at ever-increasing speeds? The answer to this is hardly apt to cheer up the stockholders of railroad companies.

Freight Traffic

We now come to the question of freight traffic. Here three phases have to be considered—the changes in freight traffic proper, the competition of motor trucks, and the prospects of motor trucks using elevated superhighways. The elimination of through-express passenger traffic and the use of the ground-level rail system for freight only (excepting a slight injection of passenger traffic in the way of commuter and local accommodation service) will create conditions conducive to the remarkably efficient and cheap handling of freight traffic. It will make it possible to handle freight much more expeditiously than is the case today, and will reduce the cost of freight transportation to a point where a goodly share of traffic lost to trucks will be attracted back to rails.

On the other hand, there are certain kinds of freight which the railroads are not equipped to handle. These are, in particular, commodities of low unit weight and high perishability. Furthermore, where the commodity is shipped in small packages and where neither the shipper nor the consignee is located on a railroad siding, motor trucks can do the job better than railroads. For a good many commodities, for distances up to 150 miles, shipping by truck is not only handier but also cheaper, and in view of the comparatively short distance that they would have to carry the goods in such cases, it might even be to the advantage of the railroads to get rid of such traffic.

Today, however, any traffic that trucks take away from the railroads is irretrievably lost to the latter. With the advent of the railroad-owned elevated highways, however, a large share of this traffic will be hauled by truck over these highways and will therefore pay toll to the railroad companies. What has been said about trucks and private cars applies likewise to buses.

The financing of the scheme here proposed is obviously the most serious difficulty in the way of its accomplishment, inasmuch as it would be necessary to trestle the entire length of our major railroad systems east of the Mississippi River. At the present writing it is possible to give only a very rough estimate of the expenditures that this will require. This estimate is set at about ten to twelve billion dollars. For obvious reasons this money will have to be raised by the sale of securities to the public. A market for new railroad securities will be created if public confidence in the future of railways can be restored, and the only way to do this is by showing that the railroads are alive to opportunities. Spent over a period of, say, six to ten years, this would mean the sale of about a billion dollars worth of securities a year. The amount thus raised would immediately be spent at home on new construction requiring the purchase of huge amounts of steel, concrete, copper, aluminum, and labor. Railroad spending would therefore react on industry in general, which, in turn, would increase the earnings of the producing companies and enhance the value of their securities, thus providing the psychological background necessary to incline the public to buy the additional railroad securities.

Another angle which must not be lost sight of is the influence of the proposed scheme on the destinies of the automobile industry. The construction of special elevated highways where travel at speeds up to, say, 70 m.p.h. will be made possible and safe, in so far as traffic conditions proper are concerned, will create new automobile business. This applies with as much force to motor trucks as to passenger automobiles.

It seems to be an inescapable conclusion that the railroads cannot go on as they are going, but must take drastic steps to pull themselves out of the slough of despond and mischance in which they are more and more becoming mired. To revitalize an industry represented by some $22,000,000,000 worth of securities, the adoption of a really big program is necessary. Any scheme to restore such a huge and badly shaken industry to normal must be spectacular and comprehensive enough to show from the start its ability to become a major factor in the life of the nation. With this condition satisfied, the public, which in the last few years has seen a distressing shrinkage in the value of railroad securities, will be willing to provide the carriers with additional billions of dollars without feeling that it is "throwing good money after bad."

Couzens Points Out Course For Railroads to Follow

CONTINUED FROM PAGE 16

Now, in a very few years, there has been the greatest highway development in the world's history, coupled with enormous expansion of the automotive industry, creating a transportation facility able to compete effectively with the railroads in service and rates.

There are undoubtedly inequalities in taxes required from these two means of transportation. That must be straightened out. The major part of this job, however, is within the states.

For an example I point out the enormous traffic by highway within the state of Michigan between such points as Detroit, Pontiac, Flint, Lansing and Grand Rapids, over which the Federal Government has no jurisdiction.

The farmers have contributed heavily to this new transportation system, and it will hardly become the Government to take from the farmer advantages he has gained by this investment in getting goods to market.

When Governor Roosevelt and others discuss consolidation of transportation facilities, they seem to mean not only the consolidation of railroads, but also, to be consolidated with them, motor truck and motor bus lines, thereby putting under the domination of the railroads all transportation service.

In reply, it may be said that the Interstate Commerce Commission, state commissions, or any other regulatory body set up by the Government could prevent this. However, these commissions are manned by humans and in all probability are subject to the same domination most others are from the big fellows.

But assume reference is made only to the consolidation of railroad facilities. What do we find? The history of railroad development shows great land grants were given railroads by the Government to encourage their construction. Many communities gave rights of way, street crossings and bonuses to the railroads for having their communities served and for locating the railroads' shops there.

This policy has built up many communities, with the construction of hundreds of thousands of homes for workers employed by the railroads. It has meant the development, through investment, of retail stores and banking facilities, all of which will be more or less destroyed if these consolidations mean the merging of railroad shops in one large center, the closing of many other shops in other communities, and the consolidation of office facilities in one locality.

The railroads, fathered and encouraged by Federal, state and municipal governments, owe a responsibility to these governments and especially is this true when we hear Governor Roosevelt and others devoting hours of speech and talk to the responsibility of the Government to the railroads.

If it is in the public interest to consolidate and coordinate all transportation facilities, it is not my view that this should be done at the expense and almost to the ruin of certain groups of citizens.

It might be said this happens in private industry, and why should railroad employes be more favored? But remember that the railroads are now calling on the Government to protect them. And why should the Government be so solicitous for the railroads and not the employes and merchants?

Assume that the railroads, based on pre-depression values, had investments and facilities used in the transportation service of 25 billion dollars, on which they might ask 5 per cent, or $1,250,000,000 net returns a year. Let us say they could reduce this capital investment 20 to 40 per cent, 5 to 10 billion dollars. Say 20 per cent. They then have 5 billions of alleged valuations on which they could not ask or expect a return.

The argument will be heard: That may be true, but it can't be done because of the investors. In other words, savings banks, insurance companies, trust companies, estates and charitable institutions have railroad bonds and they must not be affected. No such argument is used for investments in the steel industry, the motor industry, farm mortgages and home mortgages, etc.

Congress has not yet obtained sufficient reliable information as to whether motorbuses or trucks pay their proper share of taxes for highways. It is a much controverted question, the automobile industry claiming they do and the railroads that they do not.

Congress should have such thorough information and if it finds the buses and trucks do not pay their proper share, they should be made to, by proper state and Federal cooperation.

Does Our Industry Need a Dictator?

CONTINUED FROM PAGE 15

its dangerous practices and competitive problems until Will Hays was mutually selected to keep unfair principles and destructive policies out.

Organized baseball had trials and tribulations that at one time dangerously threatened its very existence until Judge Landis was appointed to keep them on a charted course, which almost immediately restored public confidence and placed baseball upon a firm foundation.

If fear is going to continue to keep the truck industry throttled by the over-allowance obsession, then we will continue to be a victim of circumstances within our own control, with resultant terrific losses, until our weaker brothers are strangled to death or until by force of circumstances and lack of leadership and courage we are compelled to create a dictatorship.

(EDITOR'S NOTE—Next month the author will discuss factory sales literature, truck advertising and capacity ratings from the field sales organization point of view.)

Be Sure That Dr (iver) Jekyll Isn't a Chronic Monster Hyde

CONTINUED FROM PAGE 24

and drives under a strain. Some very good drivers thus lose their "nerve" and become accident-prone.

The "Worried Driver"

Loss of sleep, extreme fatigue, worry over business and similar conditions may cause many accidents. Chronic illness of the driver or unpleasant home conditions, due to illness or domestic relations, have accounted for a certain number of accidents to some individuals. During the depression there are a number of accident cases on record which seem best explained on the basis of preoccupation. A man rushing about to keep his business going not only uses excessive speed but at the same time his *efficiency* is decreased considerably through worry.

The "Dumb" Driver

When a man is dexterous, has a great deal of strength and uses it efficiently, he is said to be athletic. In the same way a person who has mental ability and can use it efficiently is said to be intelligent. This intelligence is measured by means of standard tests which are known to almost everyone. We have found that those with low I. Q.'s (intelligence quotient) are very slow to understand the situation. They use poor judgment and get into trouble.

The "Reckless Driver"

When an accident-prone driver cannot be classified in any other way he is said to be reckless. The road-hog, the drunk, the speed demon, the paranoic, the man with defective vision, the "ne'er do well," the nervous person, the unintelligent, and all the other cases that are not definitely analyzable go into this group. The term should not be used. The reason for the "recklessness" should be studied.

A good medical examination, together with a careful mental examination by a trained psychologist using apparatus for measuring accident susceptibility would easily reduce the number of accidents 60 to 80 per cent, if backed by suitable administrative machinery. Diagnostic studies of one large utilities company reduced accidents 50 per cent for the year following the study.

Fleet Management Rates Place Among Professions

CONTINUED FROM PAGE 26

Technical School, or by the much longer route—via the "School of Experience"—is not of prime importance, except that in the latter case, the age of the individual will be much greater as a result, and his useful creative period shortened to the same extent.

Unless theoretical knowledge has been supplemented and orientated by practical automotive experience, it would be as useless as a tool in the hands of a man who did not know what to do with it.

The successful transportation executive must be of an inquiring, analytical mind—and having as a motto —"show me"—yet with an open mind that is willing to be "shown." He must be thoroughly conversant with accounting and statistical methods; and, while using them as his servant to gain the desired ends he must be able to see what is back of them.

A superficial knowledge of purchasing methods, ethics, etc., business law (patents, contracts, etc.), will enable the transportation engineer to work in harmony with other departments.

The design and construction, at least preliminary layout and general supervision of operating and servicing plants—selection and layout of equipment, etc.—will be an important part of his work. The correct answer to these questions will have a profound bearing upon the efficiency of subsequent operations.

"Executive Ability"—this in a large part consists in "selling" ideas to subordinates, so they will be "with him" in carrying out ideas as planned. "Selling" is one of the transportation engineer's big jobs.

Then he must be able to "Train" and "Lead" his staff, so the ideas will "blossom out" into actual and successful operations. The "Leader" and not the "Driver" type is the successful executive in this day and age.

As economics is a matter running through all businesses at all times, he must have a thorough grounding in this important topic so he will not be found unwittingly working against firmly established Economic Laws.

It is needless to say that the general tone of the organization will take shape in large measure from its leader. If he be listless, sickly and frequently absent—the entire organization will assume very much the same characteristics. The executive should possess excellent health, vigor, and boundless endurance, together with a bright outlook on life—a temperament that is not easily ruffled.

Initiative is the ability to think and plan and needs no further comment.

Industry means constant attention to business and the inculcation of that spirit into the organization.

Diplomacy, tact and cooperation mean ability to live harmoniously in a large family. This characteristic has to go hand in hand with that of "Forcefulness" so that the latter will not get "out of control."

Integrity needs little comment. It means simply that all actions of the executive and his organization shall be based solely upon the best interests (as he sees them) of his employer, and *on no other consideration.*

Loyalty starts at the top and must be fostered by fair dealings and policies. It can be controlled to a very great extent by the attitude and actions of the head of the Transportation Department.

A proper balance between all of the above qualities is of course the ideal.

The natural question that has doubtless arisen in the mind of the average reader of this article is "where are we to find this wonderful individual—this superman—embodying all these talents? The obvious answer—"In Story Books."

However, this is unquestionably the ideal to shoot at, and the nearer it is attained—the further will the individual advance, and the more valuable will he be to his employers—provided of course—they fully appreciate his talents and give them sufficient latitude and cooperation.

The President's Page

CONTINUED FROM PAGE 13

size and cost—and then make every effort to convince the operator why a particular unit will do his work with the greatest profit.

In the purchase of passenger cars such considerations are not so important and certainly they are not vital. As between different models in a line, the choice is one which the customer is quite able to make in accordance with his tastes, the size of his pocketbook and the size of his family. There is no need for the dealer to urge the purchase of a sedan when he prefers a coupe on the basis of cost.

But a truck is different. It is bought to use in business, and some thought should be given to the demands that will be made upon it and its ability to meet the demands. It is usually possible to select the right unit from the ordinary line. Special jobs obviously call for special specifications and can be built to order. The ordinary truck body built for utility would not be satisfactory for an expensive florist, an exclusive jeweler or a medicine show.

Our organization, as have some others, has gathered considerable information on motor transportation. We have made many special studies of trucking problems for a variety of businesses. I do not overstate it to say that we have experts who could advise dealers who are not sure that they know what is the best advice to give the customer. I have no doubt that other manufacturers are similarly equipped.

But in the end it is not so much a matter of giving advice as it is a policy of giving value that must concern us most. In a truck, value is not necessarily speed, power, capacity or appearance, but the proper combination of these qualities that will make the truck a money-maker for its owner. Value in a truck is low cost of operation and maintenance, dependability and long life. These are things that are not visible to the naked eye. Sound engineering, honest manufacturing practices and intelligent sales policies are the real basis of truck value, for they result in a truck that gives the owner an opportunity to make a profit.

If we produce value, volume will take care of itself. Naturally, volume is important in manufacturing, and the tendency is to concentrate the greatest effort on the line that gives the greatest promise of sale. Only a million trucks were in use in 1920, and today the number is about three and a half millions. No one will contend that this is saturation. And no one who gives the matter thought will believe that this same rate of growth can be continued unless the trucking business can be made more profitable to the operators so that the field of operations will be widened and intensified. Businesses do not grow unless they are profitable.

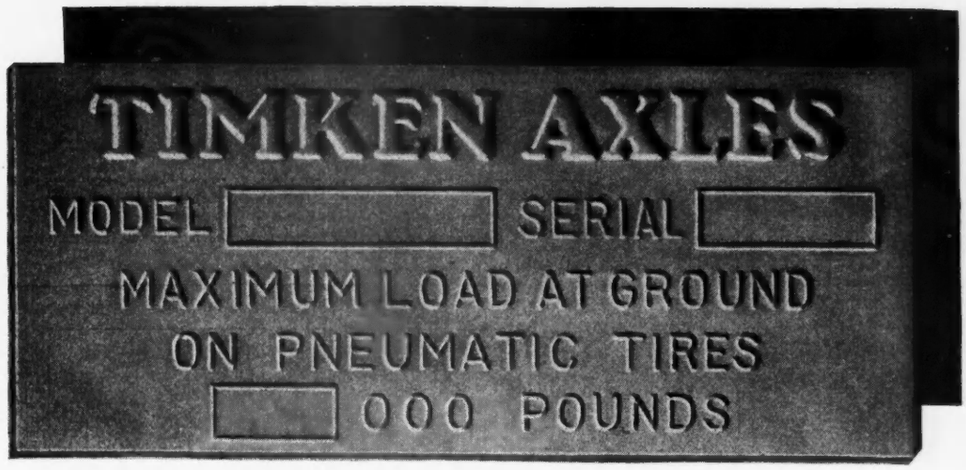
So, to put it plainly, we must look at the problem as one of producing motor trucks that will operate more efficiently and at lower cost. The record of the past is the hope of the future. Ten years ago the average engine speed of heavy-duty units was in the neighborhood of 1800 r.p.m. Today the normal operating speed has moved up to 2800 to 3000 r.p.m. with corresponding increase in operating efficiency.

But high speed is dangerous without ability to control it. Heavily loaded trucks must be able to stop completely within a reasonable space. Engineers have solved the problem through replacing old style mechanical brakes with modern hydraulic brakes with vacuum booster equipment.

Chassis weights per pound of payload have been steadily decreased, and today considerably more profitable merchandise can be loaded on a given amount of dead metal than ever before.

These achievements are being constantly improved upon and are adding to the profit possibilities of operators, whether they drive a single truck or direct huge fleets.

It is only by this method—producing dependable, long lived and economically operated trucks—and selling the right truck for the job—that we can be of help to the operators. And by "help" I mean profits from operation. This is also the surest way to help ourselves.



This plate . . is a *Guarantee of Satisfaction*

TWO trailer-axle problems have been created by modern transportation — brakes and pneumatic tires.

There is just one way, we believe, to solve both with profit and satisfaction — Timken Tubular Axles for trailers.

On each Timken Tubular Axle appears the Timken capacity plate. It is more than a yard stick of load capacity; it is an assurance of Timken quality, of Timken engineering skill and experience. It supplements the trailer manufacturer's own guarantee that all other parts are of similar excellence.

These axles are engineered (1) to withstand braking torque—designed for and equipped with any type of brakes you want; and (2) to assure proper, even load distribution on pneumatic tires, *preventing* excess wear so common on trailer tires today.

So important is this whole subject that we have made exhaustive studies of both trailer brakes and trailer tires. The facts are set forth in booklets which are worth thorough attention of any trailer operator. They will be mailed on request.

You may have Timken Tubular Axles on new trailers by specifying them.

If your present trailers need brakes or show excess tire wear, it will *pay* you to put Timken Tubular Axles under them. They will save their entire cost in one set of dual pneumatics. Write us, or get in touch with your local distributor.

THE TIMKEN-DETROIT AXLE COMPANY DETROIT, MICHIGAN

COMMERCIAL CAR JOURNAL'S

CORRECTIONS ARE MADE EACH MONTH FROM DATA SUPPLIED DIRECT BY TRUCK MAKERS +

Line Number	MAKE AND MODEL	GENERAL (See Keynote)						TIRE SIZE		MAJOR UNITS									FRAME	
										ENGINE		TRANSMISSION		REAR AXLE						
		Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight	Chassis Wt. (Stripped)	Front	Rear	Make and Model	No. of Cylinders Bore and Stroke	Make and Model	Location and Forward Speeds	Aux. Location and Speeds	Make and Model	Gear and Type	Drive and Torque	GEAR RATIOS In High	GEAR RATIOS In Low	Side Rail Dimensions	Type
1	A.C.F. 160	6	6950	186	222	26000	10170	B9.75/22	B9.75/22	HaS 160	6-4¼x5½	BL 1714	U 4	Op	Tim 76730	2F	R	7.46	52.7	8x3	P
2	175B	6½	8300	186	222	26000	10750	B10.50/22	B10.50/22	HaS 175	6-5x6	BL 714	U 4	Op	Tim 76730	2F	R	7.46	38.6	8x3	P
3	175A	7½	8800	186	240	30000	11610	B10.50/24	B10.50/24	HaS 175	6-5x6	BL 714	U 4	Op	Tim 79730	2F	R	7.48	38.7	8x3	P
4	Am. LaF. Big Ch. 16	5	6725	226	242	24000	10000	P40x8	DP40x8	Own 16R	6-4½x6	Own 16R	A 4	No	Own 16R	2F	R	6.13	33.0	9⅞x2½x¾	P
5	Armleder 11Ha	2-3	1570	156	195	11500	4070	B7.00/20	DB7.00/20	Con 16C	6-3⅝x4⅝	Fu WOBB	U 4	No	Tim	BF	H	5.83	31.2	6x3x¼	P
6	21Ha	2½-4	2185	160	207	15300	4783	B8.25/20	DB8.25/20	Her WXB	6-3¾x4½	Fu MLU	U 4	No	Tim	BF	H	6.06	38.5	6x3x¼	P
7	31Ha	3½-5	2745	146	213	19500	5838	B9.00/20	DB9.00/20	Her WXC	6-4x4½	Fu MGU	U 4	No	Tim	BF	R	6.02	39.2	7x3x¼	P
8	41Ha	4-5½	3050	160	227	23000	6600	B9.75/20	DB9.75/20	Her WXC	6-4x4½	Fu MGU	U 4	No	Tim	BF	R	6.83	43.8	7x3x¼	P
9	61Ha	5-7	3625	146	227	24000	7400	B9.75/20	DB9.75/20	Her WXC2	6-4½x4½	Fu MGU	U 4	No	Tim	WF	R	8.5	55.2	8¼x3x⅞	P
10	71Ha	7-9	4595	164	235	29500	7800	B10.50/20	DB10.50/20	Her YXC	6-4⅝x4¾	Fu VUOG	U 5	No	Tim	WF	R	8.5	55.2	8¼x3x⅞	P
11	TRHA 10		3645	148	174	35000	6250	B9.75/20	DB9.75/20	Her YXC3	6-4⅝x4¾	Fu VUOG	U 5	No	Tim	BF	R	7.8	55.1	7x3x¼	P
12	TRDA 10		3895	148	174	39000	6450	B9.75/20	DB9.75/20	Her YXC3	6-4⅝x4¾	Fu VUOG	U 5	No	Wis	2F	R	7.8	56.8	7x3x¼	P
13	Atterbury A	1	1095	132	145	7000	3400	P30x5	P30x5	Lyc WTG	6-3x4¾	Wa T9	U 4	No	Tim 51000H	B	H	6.20	39.7	5¾x3¼x1¼	N
14	K	1½	1595	145	160	8000	3640	P32x6	P32x6	Lyc WTG	6-3x4¾	Wa T9	U 4	No	Tim 52200H	B	H	6.50	39.7	5¾x3¼x1¼	N
15	G	2	1985	160	160	10000	3955	P32x6	DP32x6	Lyc 4SL	6-3¼x4½	Co F4B	U 4	No	Tim 54200H	B	H	6.80	45.1	5¾x3¼x1¼	N
16	45	2-2½	2375	175	188	12000	5300	B7.50/20	DB7.50/20	Lyc ASD	6-3⅝x4½	Co W4C	U 4	No	Tim 54200H	B	H	6.80	39.8	7x3¼x¼	N
17	50	2½-3	2950	189	202	14000	5800	B8.25/20	DB8.25/20	Lyc ASD	6-3¾x4½	Co W4C	U 4	No	Tim 56200H	B	H	7.40	43.3	7x3¼x¼	N
18	R	3	3700	173	199	16040	7250	P34x7	DP34x7	Con 18R	6-4x4½	BL 35-4	U 4	No	Tim 65001H	WF	H	7.1	37.4	7x3¼x¼	C
19	60	3	3150	190	215	16000	6000	B9.00/20	DB9.00/20	Lyc ASD	6-3¾x4½	CoW4C	U 4	No	Tim 58200H	B	H	7.80	45.6	7x3¼x¼	N
20	65	3-3½	4050	209	221	18500	7800	B9.00/20	DB9.00/20	Con 18R	6-4x4½	BL 51-5	U 4	No	Tim 65200H	W	R	7.50	40.1	8x3¼x¼	N
21	70	3½-4	4½ 0	222	222	23000	8400	B9.75/20	DB9.75/20	Con 20R	6-4¼x4¾	BL 51-5	U 5	No	Tim 65720H	W	R	8.50	62.9	8x3¼x¼	N
22	C	3½	4750	186	220	19315	8300	B36x8	DP36x8	Con 20R	6-4¼x4¾	BL 51-5	U 4	No	Tim 65706D	WF	H	7.25	38.8	8x3¼x¼	C
23	100	5-6	5675	223	237	28000	9100	B10.50/20	DB10.50/20	Con 21R	6-4⅜x4¾	BL 55-7	A 7	No	Tim66720DH	W	R	9.0	85.5	9x3½x¼	N
24	Autocar R	1½	2250	159	189	.....	5370	B7.00/20	DB7.00/20	Own R	6-3¾x4¾	BL 234	U 4	No	Own A	SF	H	5.22	33.5	6⅞x3x⅞	T
25	RF	2	2450	159	189	.....	5630	B8.25/20	DB8.25/20	Own R	6-3¾x4¾	Own T	U 4	No	Own A	SF	H	5.22	33.0	6⅞x3x⅞	T
26	RG	2½	2600	159	210	.....	5880	P34x7	DP34x7	Own R	6-3¾x4¾	Own T	U 4	No	Own D	2F	H	6.21	39.3	8x3x¼	T
27	A	2½	3000	150	192	.....	6350	B8.25/20	DB8.25/20	Own SD	6-4x4¾	Own T	U 4	No	Own A	SF	H	5.22	33.0	8x3x¼	T
28	D	3	3500	150	192	.....	6375	P34x7	DP34x7	Own SD	6-4x4¾	Own T	U 4	No	Own D	2F	H	6.21	39.3	8x3x¼	T
29	DE	3½	3850	150	210	.....	6890	B9.00/20	DB9.00/20	Own SD	6-4x4¾	Own T	U 4	No	Own TE	2F	H	6.43	40.7	8x3x¼	T
30	DF	3½	3950	150	192	.....	7220	B9.00/20	DB9.00/20	Own SD	6-4x4¾	Own T	U 4	No	Own TE	2F	H	6.43	40.7	8x3x¼	T
31	(Eng.und.seat) HS	3½	4600	114	161	.....	7900	P40x8	DP40x8	Own M	4-4½x5½	Own T	U 4	No	Own C	2F	H	8.57	54.3	7x2½x¼	T
32	" " " SHS	3½	4800	114	161	.....	7900	P40x8	DP40x8	Own SCH	6-4¼x4¾	Own T	U 4	No	Own C	2F	H	8.57	54.3	7x2½x¼	T
33	DH	4	4150	150	174	.....	7450	P36x8	DP36x8	Own SD	6-4x4¾	Own T	U 4	No	Own N	2F	H	8.57	54.3	8x3x¼	T
34	N	4	4600	191	227	.....	7990	B9.75/20	DB9.75/20	Own SCH	6-4¼x4¾	Own T	U 4	No	Own N	2F	H	7.20	45.6	9x3x¼	T
35	NE	5	4725	149	170	.....	8300	B9.75/22	DB9.75/22	Own SCH	6-4¼x4¾	Own D	U 5	No	Own C	2F	H	8.57	50.1	8x3x¼	T
36	NF	5	4800	191	227	.....	8350	B9.75/22	DB9.75/22	Own SCH	6-4¼x4¾	Own D	U 5	No	Own TF	2F	H	7.20	42.1	9x3x¼	T
37	NH	5	4925	149	170	.....	8350	B9.75/22	DB9.75/22	Own SCM	6-4½x4¾	Own D	U 5	No	Own C	2F	H	8.57	50.1	8x3x¼	T
38	S	5	5500	158	168	.....	8700	B9.75/22	DB9.75/22	Own SCH	6-4¼x4¾	Own T	U 4	A 3	Own CG	2F	H	8.52	54.0	9x3x¼	T
39	SE	6	5800	158	168	.....	8850	B10.50/22	DB10.50/22	Own SCM	6-4½x4¾	Own T	U 4	A 3	Own CG	2F	H	8.52	54.0	9x3x¼	T
40	C	7½	6600	158	176	.....	10950	B10.50/24	DB10.50/24	Own SCM	6-4½x4¾	BL 734	U 4	A 3	Wis 78720	2F	H	9.92	121	10½x3x⅞	T
41	CF	7½	6900	164	182	.....	11280	B10.50/24	DB10.50/24	Wau 6RB	6-5x5¾	BL 734	U 4	A 3	Wis 78720	2F	H	9.92	121	10½x3x⅞	T
42	T	7½	6000	192	242	.....	9700	B10.50/22	DB10.50/22	Own SCM	6-4½x4¾	Own T	U 4	A 3	Own TG	2F	H	7.20	88.5	9x3x¼	T
43	TE	8½	6500	192	242	.....	10700	B10.50/24	DB10.50/24	Own SCM	6-4½x4¾	BL 734	U 4	A 3	Own TG	2F	H	7.20	87.6	10½x3x⅞	T
44	TF	8½	6800	195	245	.....	10950	B10.50/24	DB10.50/24	Wau 6RB	6-5x5¾	BL 734	U 4	A 3	Own TG	2F	H	7.20	87.6	10½x3x⅞	T
45	(T) FE	20	9500	180	180	.....	12300	B10.50/24	DB10.50/24	Ste LT	6-5¼x6	BL 734	U 4	A 3	Wis 79731	2F	H	7.9	96.0	10½x3x⅞	T
46	Available T14	2	1495	Op	Op	11000	4000	B6.50/20	DB6.50/20	Wau ZK	6-3⅜x4½	W-GT9	U 4	No	Tim 53200H	SF	H	6.6	42.2	6x2x⅞	C
47	T20	2-2½	1975	Op	Op	13500	5000	B7 00/20	DB7.00/20	Wau TL	6-3⅜x4¾	BL 224	U 4	No	Tim 54300H	SF	R	6.8	43.5	6x2¼x⅞	P
48	T23	2½	2195	Op	Op	16000	5800	B7.50/20	DB7.50/20	Wau MS	6-3¾x4¾	BL 314	U 4	No	Tim 56200H	SF	R	7.4	48.8	6x2¼x⅞	P
49	T25	2½-3	2650	Op	Op	17000	6000	B8.25/20	DB8.25/20	Wau MS	6-3¾x4¾	BL 314	U 4	No	Tim 56200H	SF	R	7.4	48.8	7x2¼x⅝	P
50	T30	3	2685	Op	Op	20500	6500	B8.25/20	DB8.25/20	Wau ML	6-4x4¾	BL 51	U 4	No	Tim 58200H	SF	R	7.8	41.7	7x2½x⅝	P
51	T35	3-3½	3125	Op	Op	20500	7400	B9.00/20	DB9.00/20	Wau MK	6-4⅛x4¾	BL 554	U 4	No	Tim 58200H	SF	R	7.8	54.5	7x2½x⅝	P
52	T39	3½	3650	Op	Op	25500	8000	B9.75/20	DB9.75/20	Wau SRL	6-4⅜x5⅛	BL 615	U 5	No	Tim 65720H	WF	R	8.5	55.7	7x2½x⅝	P
53	T43	3½-4	3850	Op	Op	25500	8150	B9.75/20	DB9.75/20	Wau SRK	6-4⅜x5½	BL 60	A 7	No	Tim 65720H	WF	R	8.5	55.7	7x2½x⅝	P
54	T45	4	4985	Op	Op	27000	8800	B9.75/20	DB9.75/20	Wau 6AB	6-4½x5¾	BL 70-7	A 7	No	Tim 65720H	WF	R	8.5	80.7	7x2½x⅝	P
55	T50	5	5350	Op	Op	33000	9800	B9.75/20	DB9.75/20	Wau 6RB	6-5x5¾	BL 714-703	A 4	A 3	Tim 66720H	WF	R	9.5	90.0	7x2½x⅝	P
56	Biederman 10	1-1½	895	130	160	6000	2800	B6.50/18	B6.50/18	Con 25A	6-3⅜x4	BL 124	U4	No	Cla B373	BF	R	5.10	31.0	7x3x⅞	T
57	20	1-1½	1195	145	175	8000	3200	B6.00/20	DB6.00/20	Con 25A	6-3⅜x4	BL 124	U4	No	Cla B373	BF	R	6.37	39.4	7x3x⅞	T
58	25	1½-2	1250	160	175	10000	3450	B6.50/20	DB6.50/20	Con 25A	6-3⅜x4	BL 124	U4	No	Cla B373	BF	R	6.37	39.4	7x3x⅞	T
59	30	1½-2	1495	163	178	12000	4100	B7.50/20	DB7.50/20	Con 25A	6-3⅜x4	BL 124	U4	No	Cla B611	BF	R	6.37	39.4	7.3x⅞	T
60	35	2-2½	1850	146	188	12000	4680	B7.50/20	DB7.50/20	Her JXC	6-3¾x4¼	BL 234	U4	Op	Cla B611	BF	R	6.37	40.8	7x3x⅞	T
61	40	2½-3	2100	158	188	16000	4840	B8.25/20	DB8.25/20	Her JXC	6-3¾x4¼	BL 234	U4	Op	Cla B611	BF	R	6.37	40.8	8x3x⅞	T
62	50	2½-3	2400	176	188	20000	5600	B9.00/20	DB9.00/20	Her JXC	6-3¾x4¼	BL 234	U4	Op	Cla B805	BF	R	6.42	41.2	8x3x⅞	T
63	55	3-3½	2750	180	200	20000	6450	B9.00/20	DB9.00/20	Con E602	6-4⅛x4½	BL 524	U4	Op	Cla B805	BF	R	6.42	46.7	8x3x⅞	T
64	60	3½-5	3150	170	200	24000	6820	B9.75/20	DB9.75/20	Con E602	6-4⅛x4½	BL 524	U4	Op	Cla B805	BF	R	7.17	52.1	8x3x⅞	T
65	70	3½-5	3600	150	210	24000	7530	B9.75/20	DB9.75/20	Con E602	6-4¼x4½	BL 524	U4	Op	Wis 1237	2F	R	8.00	58.7	8x3½x¼	T
66	80	5-7	3900	150	210	28000	7800	B10.50/20	DB10.50/20	Con E603	6-4¼x4½	BL 524	U4	Op	Wis 1237	2F	R	8.94	65.1	8x3½x¼	T
67	Brockway 80C	1½-2	1215	149	168	9500	4075	B6.00/20	DB6.00/20	Con 26B	6-3¾x4	Wa T9	U 4	No	Tim 53200BY	SF	H	5.66	36.2	5½x2½x1¼	C
68	90C	1½-2½	1525	149	168	11500	4355	B6.50/20	DB6.50/20	Con 27B	6-3¾x4⅝	Wa T9	U 4	No	Tim 54200H	SF	H	5.83	37.4	7⅛x2½x1⅜	T
69	92	2	1800	149	168	12500	4450	P32x6	DP32x6	Con 27B	6-3¾x4⅝	Wa T9	U 4	No	Tim 54200H	SF	R	5.83	37.4	7⅛x2½x1⅜	T
70	120C	2-3	1990	156	188	15000	5500	P32x6	DP32x6	Con 30B	6-4x4½	BL 314	U 4	No	Tim 54300H	SF	H	5.85	38.5	7½x3x1¼	T
71	140C	2½-3½	2495	156	200	17500	6100	P32x6	DP32x6	Con 30B	6-4x4½	BL 314	U 4	Op	Wis 4916L	2F	R	6.66	43.5	7½x3x1¼	T
72	141C	3-4	2935	170	212	19500	6500	P32x6	DP32x6	Con 30B	6-4x4½	BL 314	U 4	Op	Wis 70000L	2F	R	7.0	46.2	8x3x¼	T
73	170C	3-4	3160	170	212	19500	7100	P32x6	DP32x6	Con 33B	6-4½x4¾	BL 554	U 4	Op	Wis 70000L	2F	R	6.41	46.6	8x3x¼	T
74	175C	3-4	3660	170	224	19500	7200	P34x7	DP34x7	Con 34B	6-4½x4¾	Fu VUOG	U 5	Op	Wis 70000L	2F	R	6.41	46.6	8x3x¼	T
75	195C	3½-5	3820	170	224	22000	8100	P34x7	DP34x7	Con 33B	6-4½x4¾	BL 554	U 4	Op	Wis 1237H	2F	R	7.2	52.4	8¼x3x⅞	T
76	220C	5-7	4560	170	224	25000	8675	P36x8	DP36x8	Con 34B	6-4½x4¾	BL 554	U 4	Op	Wis 1627KH	2F	R	6.96	50.7	8¼x3x⅞	T
77	260C	7-10	5850	212	240	28000	9000	B10.50/22	DB10 50/22	Con 35B	6-4½x5¼	Fu MHU	U 4	Op	Wis 1737KH	2F	R	8.05	50.7	8¼x3x⅝	T
78	Chevrolet... Comm'l	½	355	109	109	4000	1935	B5.25/18	B5.25/18	Own	6-3x3¾	Own	U 3	No	Own	S½	U	4.1	13.0	5x2¼x⅝	C
79	Utility	1½	520	131	131	7400	2730	P30x5	P32x6	Own	6-3x3¾	Own	U 4	No	Own	S½	U	5.43	39.1	6x2¼x⅞	L
80	Utility	1½	575	157	157	8200	2930	P30x5	DP32x6	Own	6-3x3¾	Own	U 4	No	Own	S½	U	5.43	39.1	7x2⅝x⅞	C
81	Chicago 1-15-E	2	1395	150	174	9900	4200	B6.50/20	DB6.00/20	Wau ZK	6-3⅜x4½	BL 224	U 4	No	Tim 53200H	BF	R	6.6	40.9	7x4¼	T
82	1-25-E	2½	1885	160	208	11400	5100	B7.00/20	DB7.00/20	Wau TK	6-3⅜x4¾	BL 224	U 4	No	Tim 54200H	BF	R	6.8	42.0	7x4¼	T
83	1-30-E	3	2250	160	208	12600	5400	B7.50/20	DB7.50/20	Wau MK	6-4⅛x4¾	BL 314	U 4	No	Tim 56200H	BF	R	6.2	41.0	7x4¼	T
84	1-35-E	4	2600	160	208	15300	5800	B8.25/20	DB8.25/20	Wau MK	6-4⅛x4¾	BL 314	U 4	No	Tim 58200H	BF	R	6.8	44.9	7x4¼	T
85	1-50-B	6	3950	140	236	23400	7780	B9.75/20	DB9.75/20	Wau 6SRL	6-4⅜x5⅛	BL 60 Max	A 7	No	Tim 65720H	WF	R	7.75	73.6	6x3½x⅛	C
86	Coleman E52	2½	3800	20	144	12800	7200	B9.00/24	B9.00/24	Bud K393	6-4¼x4¾	Fu RU16	U 4	A 2	Wis CR15	2F	H	Op	Op	10x2½x⅜	B
87	(All 4 Wh.Dr.) E53	3½	5300	30	180	18900	8000	B9.75/24	B9.75/24	Bud K428	6-4⅝x4¾	Fu MRU16	U 4	A 2	Wis CR26	2F	H	Op	Op	12x2½x⅜	B
88	E54	4-5	5600	30	180	20400	8800	B10.50/24	B10.50/24	Bud L468	6-4¼x5½	Fu MRU16	U 4	A 2	Wis CR30	2F	H	Op	Op	12x2½x1¼	B
89	E55	5	6150	30	180	23000	9600	B11.25/24	B11.25/24	Bud L525	6-4½x5½	Fu MRU16	U 4	A 2	Wis CR30	2F	H	Op	Op	12x2½x1¼	B
90	E55S	5-6	7200	44	180	24500	10600	B11.25/24	B11.25/24	Bud L525	6-4½x5½	Fu MRU16	U 4	A 2	Wis CR122	2F	H	Op	Op	12x2⅝x1¼	B
91	E56	6-7½	7800	44	180	29800	11600	B10.50/24	DB10.50/24	Bud GF6	6-4¾x6	Fu MHU	U 4	A 2	Wis CR122	2F	H	Op	Op	12x2⅝x1½	B
92	E57	7½-10	9700	44	180	32000	12400	B11.25/24	DB11.25/24	Ste LT6	6-5¼x6	BL 714	U 4	A 2	Wis CR122	2F	H	Op	Op	16x3x1¼	B
93	Corbitt(3) 7B6	1½	1705	150	170	8500	3410	P32x6	P32x6	Con 18E	6-3¾x4	BL 214	U 4	No	Tim 52200H	BF	H	5.8	29.0	5⅝x3x¼	T
94	8B4	1½	980	134	134	8500	3200	B6.00/20	P32x6	Con W10	4-3⅞x4¼	Ow 8T	U 4	No	Own 8R	SF	H	5.4	38.4	5⅝x3x¼	P
95	8B6	1½	1080	136	136	8500	3275	B6.00/20	P32x6	Con 25A	6-3⅜x4	Ow 8T	U 4	No	Own 8R	SF	H	5.4	38.4	5⅝x3x¼	P
96	10B6	1½-2	1310	171	191	10500	3950	B6.50/20	DB6.50/20	Con 25A	6-3⅜x4	BL 214	U 4	No	Tim 53200H	SF	H	Op	Op	5½x3½x1¼	T
97	9B6	1½-2½	2185	152	183	11900	4200	P32x6	DP32x6	Con 16C	6-3⅜x4⅝	BL 224	U 4	No	Tim 54200H	BF	H	5.57	27.8	7x3½x¼	T
98	12B6	2-3	3060	163	220	14700	4870	B7.50/20	DB7.50/20	Con E600	6-3¾x4½	BL 334	U 4	No	Tim 56200H	BF	H	Op	Op	7x3½x¼	T
99	12W6	2-3	2950	165	220	14700	4910	B7.50/20	DB7.50/20	Con E600	6-3¾x4½	BL 334	U 4	No	Tim 64800H	WF	H	Op	Op	7x3½x¼	T
100	15B6	2½-3½	3740	174	220	17500	5870	P34x7	DP34x7	Con E601	6-3⅞x4½	BL 334	U 4	No	Tim 58200H	BF	H	Op	Op	7x3½x¼	T
101	15W6	2½-3½	3850	183	224	17500	6160	P34x7	DP34x7	Con E601	6-3⅞x4½	BL 334	U 4	No	Tim 65200H	w/2	H	Op	Op	7x3½x¼	T
102	18	2½-4	4400	178	230	21600	8100	P36x8	DP36x8	Con E602	6-4¼x4½	BL 334	U 4	No	Tim 65706H	w/2	H	Op	Op	8x3½x¼	T
103	24	3½-5	5115	195	230	24800	9200	B9.75/20	DB9.75/20	Con 20R	6-4¼x4¾	BL 60	A 7	No	Tim66720H	w/2	H	Op	Op	8x3½x¼	T
104	(con't) 33	5-7½	6160	195	230	33200	10000	P40x10	DP40x10	Con 21R	6-4⅝x4¾	BL 60 Max	A 7	No	Tim68720TW	w/2	H	Op	Op	8x3x⅞	T

TRUCK SPECIFICATIONS TABLE

+ FOR MEANING OF ABBREVIATIONS AND EXPLANATION OF REFERENCE MARKS SEE PAGE 58

Line Number	ENGINE DETAILS: Piston Displacement	Compression Ratio	Torque lb. ft.	N.A.C.C. Rated H.P.	Max. Brake H.P. at R.P.M. Given	Valve Arrangement	Camshaft Drive	Piston Material	MAIN BEARINGS: Number and Diameter	MAIN BEARINGS: Length	Oiling System Type	Governor Make	FUEL SYST.: Carburetors Make	FUEL SYST.: Fuel Feed	ELEC. TRICAL: Ignition System Make	ELEC. TRICAL: Generator, Starter Make	Clutch Type and Make	Radiator Make	Universals Make	FRONT AXLE: Make and Model	Steering Gear Make	BRAKES: SERVICE: Make, Location Type, Operation	BRAKES: SERVICE: Lining Area	BRAKES: SERVICE: Drum Material	BRAKES: Hand Type, Location	BODY MOUNTING DATA: Cab to Rear of Frame	BODY MOUNTING DATA: Cab to Rear Axle	BODY MOUNTING DATA: Width of Frame	SPRINGS: Front	SPRINGS: Rear	SPRINGS: Auxiliary Type
1	468	4.4	322	43.3	120–2200	H	C	A	4–2¾	10⅜	CC	Ha	Zen	V	DR	DR	P.BL	Lo	Spi	Tim 27451	Ros	O4IA	720	A	CD	172	102	33½	42x3	56x4	½
2	707	4.4	500	60.	175–2200	H	C	A	7–3¼	14⅞	CC	Ha	Zen	M	DR	DR	dpLo	Lo	Spi	Tim 27451	Ros	O4IA	720	A	CD	172	102	33½	42x3	56x4	½
3	707	4.4	500	60.	175–2200	H	C	A	7–3¼	14⅞	CC	Ha	Zen	M	DR	DR	dpLo	Lo	Spi	Tim 27451	Ros	O4IA	816	A	CD	172	102	33½	42x3	56x4	½
4	572	4.5	360	48.6	115–1600	L	G	C	4–3	10½	FP	No	Zen	V	DR	DR	P.BL	Ow	Own	Own 16R	Own	O4IA	138	P	TX	Opt	Opt	33	44x3	56x3	¼
5	248	5.0	150	27.3	65–2600	L	G	C	7–2⅝	10⅜	PC	No	Zen	M	DR	DR	P.BB	Yo	Spi	Tim	Ros	L4IH	380	G	TX	129½	Opt	31½	40x2½	50x3	½
6	298	4.7	192	33.7	66–2200	L	G	C	7–2⅝	13¼	PC	Mo	Zen	M	AL	AL	D.BB	Yo	Spi	Tim	Ros	L4IHV	452	G	TX	129½	Opt	31½	40x2½	50x3	½
7	339	4.7	225	38.4	73–2200	L	G	C	7–2⅝	13¼	PC	Mo	Zen	M	AL	AL	D.Fu	Yo	Spi	Tim	Ros	L4IHV	578	G	TX	106	Opt	31½	40x2½	62⅝x2½	N
8	339	4.7	225	38.4	73–2200	L	G	C	7–2⅝	13¼	PC	Mo	Zen	M	AL	AL	D.Fu	Yo	Spi	Tim	Ros	L4IHV	658	G	TX	118	Opt	31½	40x2½	62⅝x2½	N
9	360	4.7	238	40.3	80–2200	L	G	C	7–2⅝	13¼	PC	Mo	Zen	M	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IHV	768	G	TX	106	Opt	31½	41x2½	62⅝x2½	N
10	428	4.7	280	46.	93–2200	L	G	C	7–3	15	PC	Mo	Zen	M	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IHV	893	G	TX	118	Opt	31½	41x2½	62⅝x3	N
11	478	4.7	318	51.2	103–2200	L	G	C	7–3	15	PC	Mo	Zen	M	AL	AL	D.Fu	Yo	Spi	Tim	Ros	L4IHV	658	G	TX	91¾	Opt	31½	41x2½	62⅝x3	N
12	478	4.4	318	51.2	103–2200	L	G	C	7–3	15	PC	Mo	Zen	M	AL	AL	D.Fu	Yo	Spi	Tim	Ros	L4IHV	658	G	TX	92⅞	Opt	31½	41x2½	62⅝x3	N
13	201	5.5	142	21.6	64–2800	L	G	C	4–2⅝	9⅛	CC	Ha	Zen	G	DR	DR	P.BB	Fe	Spi	Tim 11710H	Gem	L4IH	424	p	T	96	53½	34	38x2¼	50x2½	N
14	201	5.5	142	21.6	64–2800	L	G	C	4–2⅝	9⅛	CC	Ha	Zen	G	DR	DR	P.BB	Fe	Spi	Tim 11710H	Ros	L4IH	437	p	T	118	66½	34	38x2¼	50x2½	N
15	224	4.9	146	25.3	62–2800	L	G	C	4–2⅝	9⅛	CC	Ha	Zen	G	AL	AL	P.BB	Pe	Spi	Tim 31000H	Ros	L4IH	450	p	T	142	81½	34	38x2½	50x7½	½
16	298	5.0	198	33.7	85–3000	L	G	C	4–2⅝	10½	CC	Ha	Zen	M	AL	AL	P.BB	Pe	Spi	Tim 31000H	Ros	L4IH	450	e	T	149	92	34	39x2½	56x3	½
17	298	5.0	198	33.7	85–2800	L	G	C	4–2⅝	10½	CC	Ha	Zen	M	AL	AL	P.BB	Pe	Spi	Tim 33010H	Ros	L4IH	540	e	T	173	105	34	39x2½	56x3	½
18	339	4.6	212	38.4	82–2400	H	C	B	7–2¾	13⅛	PC	Ha	Zen	V	DR	AL	D.BL	Yo	Spi	Tim 14703H	Ros	L4IHV	275	p	T	148½	90½	34	41¼x3	54x3½	½
19	298	5.0	198	33.7	85–2800	L	G	C	4–2⅝	10½	CC	Ha	Zen	M	AL	AL	D.BL	Pe	Spi	Tim 33010H	Ros	L4IH	657	e	T	173	106	34	39x2⅛	56x3	½
20	339	4.6	212	38.4	81–2500	H	C	C	7–2¾	13⅛	FP	Ha	Zen	V	AL	AL	D.BL	Pe	Spi	Tim 35000H	Ros	L4IH	657	e	T	197	119	34	40x3	56x3	½
21	381	4.5	238	40.8	87–2400	H	C	C	7–2¾	13⅛	FP	Ha	Zen	V	AL	AL	D.BL	Pe	Spi	Tim 35000H	Ros	L4IH	765	e	T	221	132	34	40x3	56x3½	½
22	381	4.5	238	40.8	82–2400	H	C	B	7–2¾	13⅛	PC	Ha	Zen	V	DR	AL	D.BL	Yo	Spi	Tim 15302	Ros	T2IMV	500	e	T	169½	103½	34	41½x3	54x3½	½
23	428	4.9	268	45.9	101–2400	H	C	C	7–2¾	13⅛	FP	Ha	Zen	V	AL	AL	D.BL	Pe	Spi	Tim 26450H	Ros	L4IH	864	e	F	221	133	34	40x3	56x4	½
24	314	5.2	213	33.7	75–2400	L	G	C	7–3	12⅝	FP	No	Str	M	DR	DR	P.BL	GO	Spi	Tim 31000	Ros	LO4ID	450	e	2I	124¼	72⅝	34	40x2½	54x3	½
25	314	5.2	213	33.7	75–2400	L	G	C	7–3	12⅝	FP	No	Str	M	DR	DR	P.BL	GO	Spi	Tim 31000	Ros	LO4ID	450	e	2I	124¼	72⅝	34	40x2½	54x3	½
26	314	5.2	213	33.7	75–2400	L	G	C	7–3	12⅝	FP	Ow	Str	M	DR	DR	P.BL	GO	Spi	Tim 31000	Ros	LO4ID	450	e	2I	124¼	72⅝	34	40x2½	54x3	½
27	358	5.2	240	38.4	84–2500	L	G	C	7–3	12⅝	FP	Ow	Str	M	DR	DR	dpLo	GO	Spi	Tim 33000	Ros	LO4IDV	450	e	2I	115¼	63⅝	34½	40x2½	54x3	½
28	358	5.2	240	38.4	84–2500	L	G	C	7–3	12⅝	FP	Ow	Str	M	DR	DR	dpLo	GO	Spi	Tim 33000	Ros	LO4IDV	450	e	2I	115¼	63⅝	34½	40x2½	54x3	½
29	358	5.2	240	38.4	84–2500	L	G	C	7–3	12⅝	FP	Ow	Str	M	DR	DR	dpLo	GO	Spi	Tim 33000	Ros	LO4IDV	519	e	2I	115¼	63⅝	34½	40x2½	54x3	½
30	358	5.2	240	38.4	84–2500	L	G	C	7–3	12⅝	FP	Ow	Str	M	DR	DR	dpLo	GO	Spi	Tim 33000	Ros	LO4IDV	519	e	2I	115¼	63⅝	34½	40x2½	54x3	½
31	350	4.6	218	32.4	45–1450	L	G	A	2–2¾	B	SP	Ow	Str	G	AB	LN	dpLo	Ow	Spi	Own J	Ros	O2IM	506	e	2I	135½	76	34½	42½x3	54x3	½
32	404	5.1	271	43.4	94–2500	L	G	C	7–3	14½	FP	Ow	Str	G	DR	DR	dpLo	Ow	Spi	Own J	Ros	O2IM	506	e	2I	135½	76	34½	41x2¼	53x3	½
33	358	5.2	240	38.4	84–2500	L	G	C	7–3	12⅝	FP	Ow	Str	M	DR	DR	dpLo	GO	Spi	Tim 35000	Ros	LO4IDV	519	e	2I	115¼	63⅝	34½	42½x3	54x3	½
34	404	5.1	271	43.4	94–2500	L	G	C	7–3	14½	FP	Ow	Str	M	DR	DR	dpLo	GO	Spi	Tim 35000	Ros	LO4IDV	519	e	2I	115¼	63⅝	34½	42½x3	54x3	½
35	404	5.1	271	43.4	94–2500	L	G	C	7–3	14½	FP	Ow	Str	M	DR	DR	dpLo	GO	Spi	Tim 35000	Ros	LO4IDV	519	e	FD	174⅜	104½	34½	40x2½	54x3	½
36	404	5.1	271	43.4	94–2500	L	G	C	7–3	14½	FP	Ow	Str	M	DR	DR	dpLo	GO	Spi	Tim 35000	Ros	LO4IDV	519	e	FD	110	62	34½	40x2½	54x3	½
37	453	5.1	309	48.6	101–2400	L	G	C	7–3	14½	FP	Ow	Str	M	DR	DR	dpLo	GO	Spi	Tim 35000	Ros	LO4IDV	519	e	FD	174⅜	104½	34½	40x2½	54x3	½
38	404	5.1	271	43.4	94–2500	L	G	C	7–3	14½	FP	Ow	Str	M	DR	DR	dpLo	GO	Spi	Tim 35000	Ros	LO4IDV	519	e	FD	110	62	34½	40x2½	54x3	½
39	453	5.1	309	48.6	101–2400	L	G	C	7–3	14½	FP	Ow	Str	M	DR	DR	dpLo	GO	Spi	Tim 26450	Ros	LO4IDV	544	e	FD	122½	74½	34½	42½x3	54⅜x4	½
40	453	5.1	309	48.6	101–2400	L	G	C	7–3	14½	FP	Ow	Str	M	DR	DR	dpLo	GO	Spi	Tim 26450	Ros	LO4IDV	544	e	FD	122½	74½	34½	42½x3	54⅜x4	½
41	677	4.6	462	60.0	126–1800	L	G	A	4–3½	11⅜	PC	Wa	Str	M	DR	DR	dpBL	GO	Spi	Tim 27450	Ros	LO4IDV	664	e	FD	122⅜	74⅝	34½	42½x3	54⅜x4	½
42	453	5.1	309	48.6	101–2400	L	G	C	7–3	14½	FP	Ow	Str	M	DR	DR	dpLo	GO	Spi	Tim 26450	Ros	O4IA	544	e	FD	175⅛	105	34½	42½x3	54⅜x4	½
43	453	5.1	309	48.6	101–2400	L	G	C	7–3	14½	FP	Ow	Str	M	DR	DR	dpLo	GO	Spi	Tim 26450	Ros	O4IA	544	e	FD	242½	107¼	34½	42½x3	54⅜x4	½
44	677	4.6	462	60.0	126–1800	L	G	A	4–3½	11⅜	PC	Wa	Str	M	DR	DR	dpBL	GO	Spi	Tim 27450	Ros	O4IA	544	e	FD	175⅛	105⅝	34½	42½x3	54⅜x4	½
45	780	4.7	475	66.1	156–1800	L	G	A	7–3	16⅛	FP	St	Ze2	M	NE	LN	dpBL	GO	Spi	Tim 27450	Ros	Ws4IA	664	e	FD	114¾	84	34½	42½x3	54⅜x4	½
46	221	4.9	144	27.3	63–3000	L	G	C	4–2⅜	6⅛	FP	No	Sch	M	DR	DR	P.Jo	Ch	Blo	Tim 30000H	Ros	L4IH	269	D	TX	Opt	Opt	31¾	38x2¼	48x2½	½
47	255	5.1	175	27.3	69–2600	L	G	C	4–2⅜	7⅜	FP	No	Sch	M	DR	DR	D.BL	Ch	Blo	Tim 31000H	Ros	L4IH	330	E	TX	Opt	Opt	31¾	38x2¼	50x3	½
48	315	4.6	200	33.8	73–2300	L	G	C	7–2⅝	12½	CC	Wa	Sch	M	DR	DR	D.BL	Ch	Blo	Tim 33000H	Ros	L4IH	330	E	TX	Opt	Opt	31¾	38x2¼	50x3	½
49	315	4.6	200	33.8	73–2300	L	G	C	7–2⅝	12½	CC	Wa	Sch	M	DR	DR	D.BL	Ch	Blo	Tim 35000H	Ros	L4IH	330	E	TX	Opt	Opt	32	40x2½	50x3	½
50	358	4.4	230	38.4	80–2500	L	G	C	7–2⅝	12½	CC	Wa	Sch	M	DR	DR	D.BL	Ch	Blo	Tim 35000H	Ros	L4IH	376	E	FD	Opt	Opt	32	40x2½	50x3	½
51	381	4.4	242	40.8	85–2500	L	G	C	7–2⅝	12½	CC	Wa	Sch	M	DR	DR	D.BL	Ch	Blo	Tim 35000H	Ros	L4IH	376	E	FD	Opt	Opt	32	40x2½	50x3	½
52	462	4.5	305	45.9	102–2400	L	G	C	7–3	13⅜	CC	Wa	Sch	M	DR	DR	D.BL	Ch	Blo	Tim 35000H	Ros	L4IHV	462	E	FD	Opt	Opt	32	40x2½	50x3	½
53	517	4.5	335	51.3	110–2300	L	G	C	7–3	13⅜	CC	Wa	Sch	M	DR	DR	D.BL	Ch	Blo	Tim 35000H	Ros	L4IHV	462	E	FD	Opt	Opt	32	40x2½	50x3	½
54	549	4.5	330	48.6	100–2000	L	G	C	4–3½	11⅜	CC	Wa	Sch	M	DR	DR	D.BL	Ch	Blo	Tim 26450H	Ros	L4IHV	486	E	FD	Opt	Opt	32	40x2½	50x3	½
55	677	4.4	440	60.0	125–1900	L	G	C	4–3½	11⅜	CC	Wa	Str	M	DR	DR	D.BL	Ch	Blo	Tim 26450H	Ros	L4IHV	486	E	FD	Opt	Opt	32	40x2½	50x3	½
56	215	5.0	142	27.3	72–3000	L	G	A	4–2⅜	6⅜	CC	No	Zen	M	DR	DR	P.BL	Lo	MM	C1F212	Ros	L4IH	312	p	G	TX	89	54	36	47x2¼	50x2½	N
57	215	5.0	142	27.3	72–3000	L	G	A	4–2⅜	6⅜	CC	No	Zen	M	DR	DR	P.BL	Lo	MM	C1F212	Ros	L4IH	312	p	G	TX	117	69	36	47x2¼	50x2½	N
58	215	5.0	142	27.3	72–3000	L	G	A	4–2⅜	6⅜	CC	No	Zen	M	DR	DR	P.BL	Lo	MM	C1F212	Ros	L4IH	312	p	G	TX	132	84	36	47x2¼	50x2½	N
59	215	5.0	142	27.3	72–3000	L	G	A	4–2⅜	6⅜	CC	No	Zen	M	DR	DR	P.BL	Lo	MM	C1F304	Ros	L4IH	414	p	G	TX	135	87	36	47x2¼	50x2½	N
60	282	5.0	194	34.	84–7800	L	G	N	7–2½	10⅛	CC	No	Zen	M	DR	DR	P.BL	Pe	MM	C1F304	Ros	L4IH	414	p	G	TX	114	66	36	47x2¼	50x3	N
61	282	5.0	194	34.	84–7800	L	G	N	7–2½	10⅛	CC	No	Zen	M	DR	DR	P.BL	Pe	MM	C1F304	Ros	L4IH	414	p	G	TX	126	78	36	47x2¼	50x3	N
62	282	5.0	194	34.	84–7800	L	G	N	7–2½	10⅛	CC	No	Zen	M	DR	DR	P.BL	Pe	MM	C1F318	Ros	L4IH	490	p	G	CX	144	96	36	47x2½	60x3	N
63	361	4.6	240	40.	98–2500	L	G	N	7–2⅝	12⅛	CC	Pe	Zen	M	DR	DR	P.BL	Pe	MM	C1F318	Ros	L4IH	490	p	G	CX	147	99	36	47x2½	60x3	N
64	361	4.6	240	40.	98–2500	L	G	N	7–2⅝	12⅛	CC	Pe	Zen	M	DR	DR	P.BL	Pe	MM	C1F318	Ros	L4IH	490	p	G	CX	137	89	36	47x2½	60x3	N
65	361	4.6	240	40.	98–2500	L	G	N	7–2⅝	12⅛	CC	Pe	Zen	M	DR	DR	P.BL	Pe	MM	Tim 35120	Ros	L4IH	616	G	CX	104	69	36	47x2½	60x3	N
66	383	4.6	252	44.	105–2500	L	G	N	7–2⅝	12⅛	CC	Pe	Zen	M	DR	DR	P.BL	Pe	MM	Tim 35120	Ros	L4IH	616	G	CX	104	69	36	47x2½	60x4	N
67	214	4.9	142	27.3	72–3400	L	G	C	A	4–2⅜	6⅜	CC	No	Zen	M	AL	AL	P.BB	GO	Spi	Col 4006	Ros	B4IM	248	G	TX	111	65	34	37x2¼	52x2½	½
68	248	4.9	160	27.3	70–3200	L	C	C	7–2⅝	10⅛	CC	No	Zen	M	AL	AL	P.BB	GO	Spi	Col 5500A8	Ros	L4IH	353	G	TD	111	65	34	37x2¼	52x2½	½
69	248	4.9	160	27.3	70–3200	L	C	C	7–2⅝	10⅛	CC	No	Zen	M	AL	AL	P.BB	GO	Spi	Col 5500A8	Ros	L4IH	353	G	TD	111	65	34	37x2¼	54x3	½
70	311	4.2	196	38.4	73–2400	H	C	N	7–2¾	13⅛	CC	No	Zen	M	AL	AL	D.BL	GO	Spi	Col 5500A7	Ros	L4IH	353	G	CD	108	69	34	40x2½	54x2½	½
71	311	4.2	196	38.4	73–2400	H	C	N	7–2¾	13⅛	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Col 5500A7	Ros	L4IHV	386	G	CD	108	69	34	40x2½	54x2½	½
72	311	4.2	196	38.4	73–2400	H	C	N	7–2¾	13⅛	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Shu 5582B	Ros	L4IHV	380	G	CD	142	83	34	40x2½	54x3	½
73	381	4.4	236	40.8	89–2400	H	C	N	7–2¾	13⅛	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Shu 5582B	Ros	L4IHV	380	G	CD	142	83	34	40x2½	54x3	½
74	427	4.2	268	45.9	100–2400	H	C	N	7–2¾	13⅛	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Shu 5582B-26	Ros	L4IHV	380	G	CD	142	83	34	40x2½	54x3	½
75	381	4.4	236	40.8	89–2400	H	C	N	7–2¾	13⅛	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Shu 5582B-26	Ros	L4IHV	471	G	CD	142	83	34½	40x2½	54x3	½
76	427	4.2	268	45.9	100–2400	H	C	N	7–2¾	13⅛	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Shu 5592B-12	Ros	L4IHV	546	G	CD	142	83	34½	40x2½	54x3	½
77	501	4.3	340	48.6	120–2200	H	C	A	7–2¾	13⅞	CC	KP	Zen	M	AL	AL	D.Fu	GO	Spi	Shu 15592B	Ros	L4IHV	546	G	CD	210	125	34¼	40x2½	54x3	½
78	194	5.2	130	26.3	53–2800	H	G	C	3–2⅛	5⅛	PG	No	Car	M	DR	DR	P.Ow	Ha	Own	Own	Own	O4IM	101	p	2I	. . . .	27⅞	. . . .	36x1¾	54x1¾	. . .
79	194	5.2	130	26.3	53–2800	H	G	C	3–2⅛	5⅛	PG	No	Car	M	DR	DR	P.Ow	Ha	Own	Own	Own	O4IM	170	p	2I	85⅜	50¼	37	36x1¾	45x2½	. . .
80	194	5.2	131	26.3	53–2800	H	G	C	2–2⅛	5⅛	PG	No	Car	M	DR	DR	P.Ow	Ha	Own	Own	Own	O4IM	170	p	2I	111⅜	76¾	37	36x1¾	45x2½	. . .
81	222	4.9	147	27.3	61–2800	L	G	C	4–2⅜	6⅛	FP	No	Zen	M	DR	DR	D.BL	Ch	Spi	Tim 30000H	Ros	L4IH	169	p	TX	Opt	70	33½	41½x2½	54x3	N
82	294	4.5	199	31.5	79–2700	L	G	C	4–2⅜	7	FP	Wa	Zen	M	DR	DR	D.BL	Ch	Spi	Tim 31000H	Ros	L4IH	281	e	TX	Opt	73	33½	41½x2½	54x3	N
83	381	4.4	242	40.8	85–2500	L	G	C	7–2⅝	12½	FP	Wa	Zen	M	DR	DR	D.BL	Ch	Spi	Tim 31000H	Ros	L4IH	328	e	TX	Opt	85	33½	41½x2½	54x3	N
84	381	4.4	242	40.8	85–2500	L	G	C	7–2⅝	12½	FP	Wa	Zen	M	DR	DR	D.BL	Ch	Spi	Tim 33020H	Ros	L4IHV	394	e	TX	Opt	97	33½	41½x2½	56x3	N
85	462	4.5	300	45.9	102–2400	L	G	C	7–3	13⅜	FP	Wa	Str	M	AL	AL	D.BL	Ch	Spi	Tim 26450	Ros	L2IH	311	e	TD	Opt	55	34	44½x2½	56x3	N
86	393	4.9	260	42.0	103–2600	L	G	C	7–3	11½	FP	Ha	Zen	P	DR	DR	D.Fu	Pe	Spi	Wis CF15	Ros	W2/4IM	238	P	TD	108	78	30	48x3	48x3	C
87	428	4.7	280	45.9	107–2600	L	G	C	7–3	11½	FP	Ha	Zen	P	DR	DR	D.Fu	Pe	Spi	Wis CF25	Ros	W2/4IM	238	P	TD	144	89	30	48x3	48x3	C
88	468	4.8	295	13.4	108–2200	L	G	C	7–3	11½	FP	Ha	Zen	P	DR	DR	D.Fu	Pe	Spi	Wis CF30	Ros	W2/4IM	238	P	TD	144	89	30	48x3	48x3	C
89	525	4.9	336	48.2	114–2200	L	G	C	7–3	11½	FP	Ha	Zen	P	DR	DR	D.Fu	Pe	Spi	Wis CF30	Ros	W2/4IM	238	P	TD	144	89	30	48x3	48x3	C
90	525	4.9	336	48.2	114–2200	L	G	C	7–3	11½	FP	Ha	Zen	P	DR	DR	D.Fu	Pe	Spi	Wis CF122	Ros	W2/4IM	252	G	TD	168	105	30	48x3½	52x3½	C
91	538	4.3	410	54.1	126–1850	L	G	C	4–3	10⅛	FP	Bu	Ste	P	DR	DR	D.Fu	Pe	Spi	Wis CF122	Ros	W2/4IM	252	G	TD	168	105	30	48x3½	52x3½	C
92	779	4.3	475	66.1	177–2200	L	G	A	7–3	13½	FP	St	Zen	P	NE	NE	dpBL	Pe	Spi	Wis CF122	Ros	O2/4IA	252	G	TD	Opt	Opt	30	48x4	52x4	C
93	214	4.7	142	27.3	61–3000	L	C	A	7–2⅛	8⅜	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 11703H	Ros	L4IH	268	p	TX	Opt	Opt	34	38x2¼	50x2½	½
94	200	4.7	125	24.0	49–2800	L	C	A	3–2⅛	5⅞	FP	No	Zen	M	DR	DR	P.BB	Pe	Spi	Own 8F	Ros	L4IH	268	p	TX	96	53	34	38x2¼	50x2½	N
95	214	4.9	142	27.3	72–3200	L	C	A	4–2⅜	6⅜	FP	No	Zen	M	DR	DR	P.BB	Pe	Spi	Own 8F	Ros	L4IH	268	p	TX	96	55	34	38x2¼	50x2½	N
96	214	4.9	142	27.3	72–3200	L	C	A	4–2⅜	6⅜	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 30020H	Ros	L4IH	287	p	TX	Opt	Opt	34	38x2¼	50x2½	½
97	248	5.0	150	27.3	70–3200	L	C	C	7–2⅝	10⅛	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 31000H	Ros	L4IH	327	a	TX	Opt	Opt	34	38x2¼	54x3	½
98	288	4.6	180	32.6	73–2700	L	C	C	7–2⅝	11⅛	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IH	345	a	TX	134	82	34	40x2½	54x3	½
99	288	4.6	180	32.6	73–2700	L	C	C	7–2⅝	11⅛	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IH	345	a	TX	134	82	34	40x2½	54x3	½
100	318	4.5	200	36.0	80–2700	L	C	C	7–2⅝	11⅛	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IH	345	a	TX	134	82	34	40x2½	54x3	½
101	318	4.5	200	36.0	80–2700	L	C	C	7–2⅝	11⅛	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IH	660	a	TD	144	88	34	40x2½	54x3	½
102	360	4.4	240	40.8	90–2500	L	C	C	7–2⅝	12¼	FP	No	Zen	M	DR	DR	D.BL	Pe	Spi	Tim 33000H	Ros	L4IH	660	a	TD	144	97	34	40x2½	54x3	½
103	381	4.2	236	40.8	88–2400	H	C	C	7–2¾	13⅛	FP	No	Zen	M	DR	DR	D.BL	Pe	Spi	Tim 35000H	Ros	L4IHV	768	a	TD	132	92	34	40x2½	54x3	½
104	427	4.2	268	45.9	112–2400	H	C	C	7–2¾	13⅛	FP	No	Zen	M	DR	DR	D.BL	Pe	Spi	Tim 26450H	Ros	L4IHV	876	a	TD	162	109	34	46x3	60x3½	½
																				Tim27450TW	Ros	T4IA	921	a	TD	162	109	34	46x3	56x4	½

Line Number	MAKE AND MODEL	GENERAL (See Keynote)						TIRE SIZE		MAJOR UNITS.									FRAME	
										ENGINE		TRANSMISSION		REAR AXLE			GEAR RATIOS			
		Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight	Chassis Wt. (Stripped)	Front	Rear	Make and Model	No. of Cylinders Bore and Stroke	Make and Model	Location and Forward Speeds	Aux. Location and Speeds	Make and Model	Gear and Type	Drive and Torque	In High	In Low	Side Rail Dimensions	Type
1	Corbitt...(T)10B6T	3–5	1650	(3)	(3)	10500	3950	B6.50/20	DB6.50/20	Con 16C	6–3⅜x4½	BL 224	U 4	No	Tim 53200H	8F	H	Op	Op	5½x3½x¼	T
2	(conc'd)..(T)9B6T	4–6	2600	(3)	(3)	11900	4,00	B7.50/20	DB7.50/20	Con E600	6–3¼x4½	BL 334	U 4	No	Tim 54200H	BF	H	Op	Op	7x3½x¼	T
3	.....(T)12B6T	4–7	3465	(3)	(3)	14700	4870	B8.25/20	DB8.25/20	Con E602	6–4½x4½	BL 335	U 4	No	Tim 56200H	BF	H	Op	Op	7x3½x¼	T
4	.....(T)15B6T	5–8	4875	(3)	(3)	17500	5870	B9.00/20	DB9.00/20	Con 20R	6–4½x4⅝	BL 335	U 5	No	Tim 58200H	BF	H	Op	Op	7x3½x¼	T
5	.....(T)18D6T	8–10	5500	(3)	(3)	21600	8100	B9.75/20	DB9.75/20	Con 22R	6–4½x5¼	BL 615	U 5	No	Tim 75720H	2F	H	Op	Op	8x3½x¼	T
6	.....(T)24D6T	10–15	6500	(3)	(3)	24800	! 200	B10.50/20	DB10.50/20	Con 16H	6–4¾x5¾	BL 7212	U 4	A 3	Tim 66720W	2F	H	Op	Op	8x3x⅄	C
7	Dart.....30G	1½–2	1595	150	180	11200	4900	B6.50/20	DB6.50/20	Her WXA2	6–3½x4½	Fu MLU	U4	No	Tim 53200H	BF	H	5.14	32.6	6x3x¼	P
8	.....40G	2	2195	150	180	13400	5650	B7.50/20	DB8.25/20	Her WXB	6–3¾x4½	Fu MLU	U4	No	Tim 54200	BF	H	6.8	34.9	7x3x¼	P
9	.....50G	2½–3	2725	150	180	16300	5750	B7.50/20	DB8.25/20	Her WXC	6–4x4½	Fu MLU	U4	No	Tim 56200	BF	H	6.16	31.6	7x3x¼	P
10	.....60G	3	3250	166	208	20700	7425	B8.25/20	DB9.00/20	Her WXC2	6–4¼x4¼	Fu JVUOG	U5	No	Tim 58200	BF	H	6.8	48.4	7x3x¼	P
11	.....80W	4	4450	170	220	25600	8500	B8.25/20	DB9.75/20	Her WXC2	6–4½x4¾	Fu VUOG	U5	No	Tim 65720	WF	H	6.8	48.0	7x3x¼	P
12	.....100W	5	5500	170	235	33600	10500	B9.75/20	DB9.75/20	Her RXC	6–4⅝x5¼	Fu MHU	U4	A 3	Tim 66720	WF	H	6.8	42.7	7x3x¼	P
13	.....150W	7½	6500	170	245	46100	11500	B9.75/20	DB10.50/20	Her HXB	6–5x8	BL 735	U5	No	Tim 68720	WF	H	6.8	42.7	9x3½x¼	P
14	.....200W	10	8500	180	250	40400	12500	B9.75/20	DB10.50/20	Her HXB	6–5x8	BL 735	U5	No	Tim SW310	WF	H	6.8	42.7	9x3½x⅄	P
15	(4 Whl. Dr.) ..60	4	5750	180	200	19000	8700	B9.00/20	DB9.00/20	Her WXC3	6–4¼x4½	Fu JVUOG	U5	A 2	Wis 69317B	DF	H	8.4	153.	7x3x¼	P
16	(4 Whl. Dr.)...80	6	6800	180	225	24000	11000	B9.75/20	DB9.75/20	Her RXC	6–4¾x5¼	Fu VUOG	U5	A 2	Wis 1237	DF	H	8.0	152.	9x3½x¼	P
17	Day Elder(4)....60	1	895	135	156	6000	3300	B6.00/20	B6.50/20	Con 25A	6–3⅝x4	WG T9	U 4	No	Tim 52200H	BF	H	5.66	36.3	5½x3¾x⅄	C
18	85	1½–2	1395	135	168	8500	3850	B6.50/20	DB6.50/20	Con 16C	6–3⅝x4⅝	WG T9	U 4	No	Tim 53200H	BF	H	6.60	42.3	5½x3¾x⅄	C
19	110	2	1825	156	186	11000	4800	B7.00/20	DB7.00/20	Con 16C	6–3⅝x4⅝	WG T9	U 4	No	Tim 54200H	BF	H	6.80	44.9	7x3¾x¼	C
20	130	2½	2225	157	199	13000	6600	B7.50/20	DB7.50/20	Con 16R	6–4x4½	BL 51	U 4	No	Tim 56200H	BF	H	6.16	40.7	7x4x¼	C
21	160	3	2795	156	204	16000	6800	B7.50/20	DB9.00/20	Con 18R	6–4x4½	BL 51	U 4	No	Tim 65200H	WF	R	6.75	36.1	9x3½x¼	C
22	200	4	3295	156	204	20000	7600	B9.00/20	DB9.00/20	Con 18R	6–4x4½	BL 554	U 4	No	Tim 67720H	WF	R	7.75	43.5	9x3½x¼	C
23	240	5	4295	162	202	24000	9500	P38x9	DP38x9	Con 21R	6–4⅝x4¾	BL 535	A 5	No	Tim 66720H	WF	R	9.50	50.8	10x3¾x⅄	C
24	Diamond T...210SF	1½	545	135	158	8500	3100	B5.50/20	B6.50/20	Her JXA	6–3⅝x4¼	WG T9	U 4	No	Cla B364	S½	H	5.4	34.6	6¼x2¼x½	C
25	.....210FF	1½	565	135	158	8500	3100	B5.50/20	B6.50/20	Her JXA	6–3⅝x4¼	WG T9	U 4	No	Cla B373E	SF	H	Opt	Opt	6¼x2½x½	T
26	.....240A	1¾	795	137	167	10000	3500	B6.00/20	P32x6	Her JXA	6–3⅝x4¼	WG T9	U 4	No	Cla B410	SF	H	Opt	Opt	7x3½y	T
27	310	2	995	155	167	12000	4200	B6.50/20	DB6.50/20	Her JXB	6–3⅝x4¼	WG T9	U 4	No	Cla B613	SF	H	Opt	Opt	7x3½y	T
28	350	2½	1295	155	179	14000	4700	B7.00/20	DB7.00/20	Her JXC	6–3¾x4¼	Cla R103	U 5	No	Cla B642	SF	H	Opt	Opt	7x3½y	T
29	.....410A	3	1695	150	194	15000	5400	B7.50/20	DB7.50/20	Her WXB	6–3¾x4½	Co W5B	U 5	No	Cla B642	SF	H	Opt	Opt	6½x3x¼	P
30	.....410B	3	2135	200	.....	15000	6200	B7.50/20	DB7.50/20	Her WXC	6–4x4½	Co RUS4C	U 4	No	Cla B642	SF	H	Opt	Opt	6½x3x¼	B
31	.....504A	3	2650	166	208	17500	6420	B8.25/20	DB8.25/20	Her WXC	6–4x4½	Co RUS4C	U 4	No	Wis 69317 BL	2F	R	Opt	Opt	6½x3x¼	C
32	.....(N) 506A	3	2950	174	240	17500	6600	B8.25/20	DB8.25/20	Her WXC3	6–4¼x4½	Co RU5C	U 5	No	Wis 69317 BL	2F	R	Opt	Opt	6½x3x¼	C
33	603	3–4	3395	169	230	20000	7540	B9.00/20	DB9.00/20	Her YXC	6–4¾x4¾	Co RU5C	U 5	Op	Wis 1237H	2F	R	Opt	Opt	6½x3x¼	P
34	.....(N) 606B	3–4	3695	179	246	20000	7600	B9.00/20	DB9.00/20	Her RXB	6–4½x5¼	Co RU5C	U 5	No	Wis 1237H	2F	H	Opt	Opt	6½x3x¼	P
35	510	4	1995	168	201	18000	6000	B7.00/20	DB8.25/20	Her WXC	6–4x4½	Co RUS4C	U 4	No	Tim 58205H	8F	R	Opt	Opt	6½x3x¼	C
36	750	4–5	4925	178	238	24000	9300	B9.75/22	DB9.75/22	Her RXC	6–4⅝x5¼	Co 8A5	A 5	Op	Wis 1627 KW	2F	R	Opt	Opt	7½x3½x⅄	P
37	Differential...E-131	2½	3200	160	160	18100	5100	B9.00/20	DB9.00/20	Lyc A8D	6–3¾x4½	BL 314	U 4	No	Tim 58200	BF	H	7.8	51.4	12x2½x¼	P
38	Dodge Bros..UF-10	½	375	109	109	4025	1925	B5.00/19	B5.00/19	Own	4–3⅝x4¾	Own	U 3	No	Own	S½	H	4.66	13.6	5x1¼x⅄	C
39	.....F-10	½	445	109	109	4125	1975	B5.25/19	B5.25/19	Own	6–3¼x4¼	Own	U 3	No	Own	S½	H	4.66	13.9	5x1¼x⅄	C
40	.....	¾–1	490	124	124	4760	2260	B6.00/20	B6.00/20	Own	4–3⅝x4¼	Own	U 3	No	Own	S½	H	5.63	21.1	6x2¾x⅄	C
41	.....	¾–1	595	124	124	4860	2360	B6.00/20	B6.00/20	Own	6–3⅜x3⅞	Own	U 3	No	Own	S½	H	5.11	19.2	6x2¾x⅄	C
42	.....UG20	¾–1	537	131	157	5900	2450	B7.50/17	B7.50/17	Own	4–3⅝x4¾	Own	U 4	No	Own	SF	H	5.85	36.1	7x2⅄x⅄	C
43	.....G20	¾–1	597	131	157	5975	2520	B7.50/17	B7.50/17	Own	6–3¼x4¼	Own	U 4	No	Own	SF	H	5.85	36.1	7x2⅄x⅄	C
44	.....	1–1½	495	133	133	5840	2590	P6.00/20	P32x6	Own	4–3⅝x4½	Own	U 4	No	Own	S½	H	5.6	36.1	6x2¾x⅄	C
45	.....	1–1½	595	133	133	5940	2690	P6.00/20	P32x6	Own	6–3⅝x3⅞	Own	U 4	No	Own	S½	H	5.1	33.4	6x2¾x⅄	C
46	.....UG-30	1–2	525	131	157	8200	2490	B6.00/20	P32x6	Own	4–3⅝x4¾	Own	U 4	No	Own	SF	H	5.85	36.1	7x2⅄x⅄	C
47	.....G30	1–2	585	131	157	8275	2560	B6.00/20	P32x6	Own	6–3¼x4¼	Own	U 4	No	Own	SF	H	5.85	36.1	7x2⅄x⅄	C
48	.....G43	1–3	795	136	165	10500	3345	B7.00/20	DB7.00/20	Own	6–3¼x4¼	Own	U 5	No	Own	SF	H	6.37	50.9	8½x2⅄x⅄	C
49	.....UF-30	1¼–2	595	136	165	8225	2581	B6.00/20	P32x6	Own	4–3⅝x4¾	Own	U 4	No	Own	SF	H	5.67	37.1	7x2⅝x⅄	C
50	.....F-30	1¼–2	695	136	165	8275	2631	B6.00/20	P32x6	Own	6–3¼x4¼	Own	U 4	No	Own	SF	H	5.67	37.1	7x2⅝x⅄	C
51	.....F-35	1½–2½	1425	140	165	10175	3780	B6.00/20	DB6.00/20	Own	6–3¾x3⅞	Own	U 4	No	Own	SF	H	6.38	41.4	7½x2⅞x¼	C
52	.....F-40	2–3½	1995	150	190	14590	5173	B6.50/20	DB6.50/20	Own	6–3⅜x5	Own	U 4	No	Own	SF	H	6.38	43.7	9½x3¼x⅄	C
53	.....	3–4	1515	135	185	12250	4235	P32x6	DP32x6	Own	6–3⅝x4½	Own	U 4	No	Own	S½	H	7.13	46.3	7x2⅄x⅄	C
54	.....(5) F-61	3–5½	2575	170	195	19429	5789	P32x6	DP32x6	Own	6–3⅜x5	Own	U 4	No	Own	SF	H	7.12	48.8	10x3¼x⅄	C
55	.....(5) G-81	4–7½	5285	170	220	25000	7840	B9.75/20	DB9.75/20	Own	8–3½x5	Own	U 5	No	Own	SF	H	7.71	69.6	10⅄x3⅄x¼	C
56	Douglas.....A6	1	1095	135	145	7500	3075	P30x5	P30x5	Bud J214	6–3⅜x4	WG T9	U 4	No	Cla B370	SF	H	5.6	36.3	5⅄x3⅄x⅄	C
57	.....B4	1½	2050	150	Op	9000	3950	P30x5	P32x6	Bud WTU	4–3¾x5½	Fu MKU12	U 4	No	Wis 4627	2F	R	6.57	26.3	5x1¼x¼	T
58	.....B6	1½	2150	150	Op	10500	4100	P30x5	P32x6	Bud HS6	6–3⅝x4½	Fu MKU12	U 4	No	Wis 4627	2F	R	6.57	26.3	6x2x¼	T
59	.....C4	2	3275	156	Op	12500	5100	P32x6	P34x7	Bud KBU-I	4–4x5¼	Fu MGU14	U 4	Op	Wis 6617	2F	R	6.9	44.8	6x2x¼	T
60	.....C6	2	3425	168	Op	15500	5850	P32x6	P34x7	Bud DW6	6–3¾x5	Fu MGU14	U 4	Op	Wis 6617	2F	R	6.33	41.1	6x2x¼	T
61	.....CD4	2½	3855	190	Op	17500	5860	P34x7	P36x8	Bud EBU-I	4–4¼x5½	Fu MGU14	U 4	Op	Wis 8817	2F	R	7.85	51.0	7x2½x¼	T
62	.....CD6	2½	3955	190	Op	17500	5800	P34x7	P36x8	Bud DW6	6–3¾x5	Fu MGU14	U 4	Op	Wis 8817	2F	R	7.85	51.0	7x2½x¼	T
63	.....D4	3	4010	186	Op	20000	6500	S36x5°	S36x10°	Bud YBU-I	6–4¼x6	Fu RU16	U 4	Op	Wis 892A	2F	R	7.25	34.8	8x2½x¼	T
64	.....D6	3	4430	186	Op	20000	6800	P36x6	DP38x7	Bud BUS	6–4x5½	Fu RU16	U 4	Op	Wis 892A	2F	R	7.25	34.8	8x2¼x¼	T
65	.....D6 Sp.	3	5500	216	Op	22000	7560	P38x7	DP40x8	Bud K428	6–4½x5½	Fu HOG	U 4	Op	Wis 1418	2F	R	8.18	76.7	10x2⅝x⅄	T
66	.....F4	5	5500	185	Op	26000	9200	S36x6	S40x12	Bud BBU	4–5x6½	Fu HU18	U 4	Op	Wis 1458	2F	R	9.12	57.	10x2⅝x⅄	T
67	.....F6	5	6300	196	Op	26000	9200	B9.75/20	DB9.75/20	Bud GL6	6–4½x6	Fu HU18	U 4	Op	Wis 1567	2F	R	10.3	64.4	10x2⅝x⅄	T
68	Duplex.....GF	2	2800	143	Op	10500	4700	P32x6	P34x7	Bud WTU	4–3¾x5½	BL 31	U 3	No	Tim 64600	W½	H	6.50	34.8	5x3x¼	C
69	.....GS	2	2950	143	Op	10500	4800	P32x6	P34x7	Bud HS6	6–3⅝x4½	BL 31	U 3	No	Tim 64600	W½	H	6.50	34.8	5x3x¼	C
70	.....S	3	3600	160	Op	15000	5600	P32x6	P36x8	Bud DW6	6–3¾x5	BL 324	U 4	No	Tim 65001	WF	H	6.75	36.2	6x3½x¼	C
71	.....FAC	3½	4250	166	Op	16500	7200	S34x5	S36x8	Bud EBU-I	4–4¼x5½	BL 51	U 5	No	Tim 65706	WF	R	8.5	45.5	7x3½x¼	C
72	(4 Whl. Dr.)..EF	3½	4250	130	Op	17000	6500	S36x8	S36x8	Bud EBU-I	4–4¼x5½	BL 51	U 4	A 2	Own EF1	I	R	8.00	86.0	6x3⅄x¼	C
73	.....SAC	4	4750	172	Op	18000	7400	S34x5	S36x8	Bud K428	6–4⅝x4¾	BL 55	A 7	No	Tim 65706	WF	R	8.5	81.0	7x3½x¼	C
74	.....K	5	5200	172	Op	21000	8000	B10.50/20	DB10.50/20	Bud L525	6–4½x5½	BL 60	A 7	No	Own 76725	Op	R	Opt	Opt	8x3½x¼	C
75	.....M	5–7	7600	168	Op	28000	10000	P34x7	DS36x7	Bud GL6	6–4½x6	BL 70	A 7	No	Tim 68700	WF	R	Opt	Opt	9½x3½x¼H	C
76	Federal.....D3	1½	670	130	190	10000	3225	B6.00/20	P32x6	Con W10	4–3½x4¼	WG T9	U 4	No	Cla B374	SF	H	6.38	40.8	6x2¾x¼	C
77	.....E3	1½	695	130	190	10000	3225	B6.00/20	P32x6	Con 25A	6–3⅝x4	WG T9	U 4	No	Cla B374	SF	H	6.38	40.8	6x2¾x¼	C
78	.....F7	1¾	1145	132	164	10000	3765	P30x5	DP30x5	Con 16C	6–3¾x4⅝	Own 7774	U 4	No	Tim 52005H	SF	H	5.83	29.2	6x ¾x¼	C
79	.....F8	2	1245	132	188	12000	3865	P30x5	DP30x5	Con 16C	6–3¾x4⅝	Own 7774	U 4	No	Tim 54200H	SF	H	6.8	31.0	6x2¾x¼	C
80	.....G5	2	995	132	188	11500	3750	B6.50/20	DB6.50/20	Con 25A	6–3⅝x4	Own 7774	U 4	No	Tim 54200H	SF	H	6.13	34.0	6x2¾x¼	C
81	.....A6	2½	1445	151	200	13500	4580	P32x6	DP32x6	Con 16C	6–3¾x4⅝	Own 7776	A 4	No	Cla B610	SF	H	6.38	38.4	6x3½x¼	C
82	.....A6T	2½–3	1745	151	200	15000	5110	P32x6	DP32x6	Con 16C	6–3¾x4⅝	Own 7776	A 4	No	Tim 58000H	SF	H	7 80	47.1	6x3½x¼	C
83	.....A6TW	2½–3	1880	151	200	15000	5110	P32x6	DP32x6	Con 16C	6–3¾x4⅝	Own 7776	A 4	No	Tim 65001H	WF	H	8..5	52.9	6x3½x¼	C
84	.....T3W	2½	1595	148	185	14000	5110	P32x6	P36x8	Wau V	4–4x5	Own 7754	A 4	No	Tim 64603H	W½	R	7.25	36.3	6x3½x¼	C
85	.....T3WFA	2½–3	1795	148	185	16000	5400	P32x6	DP32x6	Wau V	4–4x5	Own 7754	A 4	No	Tim 65001H	WF	R	8.75	43.8	6x3½x¼	C
86	.....T10B	3½–4	2550	165	230	19000	6645	P34x7	DP34x7	Con 16R	6–4x4½	Own 7784	A 4	No	Tim 58200H	BF	R	6.83	44 5	7½x3½x½	C
87	.....T10W	3½–4	2685	165	230	19000	6645	P34x7	DP34x7	Con 16R	6–4x4½	Own 7784	A 4	No	Tim 65200H	w/2	R	6.75	44.0	7x3½x½	C
88	.....A600	2½–3	1745	157	206	15000	5050	B7.50/20	DB7.50/20	Con E600	6–3¼x4½	Own 7784	A 4	No	Cla B610	SF	H	6.38	38.4	6x3½x¼	P
89	.....A600T	3–3½	2045	157	206	17000	6100	B8.25/20	DB8.25/20	Con E600	6–3¼x4½	Own 7784	A 4	No	Tim 58000H	SF	H	7.8	50.8	6x3½x¼	P
90	.....A600TW	3–3½	2180	157	206	17000	6100	B8.25/20	DB8.25/20	Con E600	6–3¼x4½	Own 7784	A 4	No	Tim 65001H	w/2	R	7.5	48.9	6x3½x¼	C
91	.....U6	4½–5	3860	165	230	22000	7420	P36x8	DP36x8	Con 20R	6–4½x4¾	BL 607	A 7	No	Tim 65706H	w/2	R	6.8	64.6	7 ½x3½x¼	C
92	.....C7	6	4485	195	249	26000	9550	B9.75/20	DB9.75/20	Con 21R	6–4¾x4¾	BL 607	A 7	No	Tim 76725H	w/2	R	7.92	75.2	7½x3½x⅄	P
93	.....C8	6	4895	195	249	26000	9650	B9.75/20	DB9.75/20	Con 21R	6–4¾x4¾	BL 607	A 7	No	Tim 76725W	w/2	R	7.92	75.2	7½x3½x⅄	P
94	.....X8	7½	4335	162	186	30000	9750	S36x6	S40x14	Con B7	4–5x6	BL 60	A 7	No	Tim 68700DP	w/2	R	11 7	111	9½x3½x¼H	C
95	.....X8R	7½	4735	162	186	30000	10475	P40x8	DP40x8	Con 21R	6–4⅝x4¾	BL 60	A 7	No	Tim 68702DP	w/2	R	11 7	111	9½x3½x¼H	C
96	Fisher-Std..JR-BX	¾–1	875	120	128	6800	2800	P30x5	P30x5	Con W10	4–3½x4¼	WG T9	U 4	No	Sal F	S½	H	5.37	34.4	6⅄x2¼x⅄	C
97	.....Sp.X	1½	950	128	136	7800	3150	P30x5	DP30x5	Con W20	4–4¼x4¼	Co F4B	U 4	No	Tim 52200H	SF	H	5.83	37.3	7x2¾x⅄	C
98	.....10-AX	1½–2	1090	136	165	8800	3220	P30x5	DP30x5	Con 17E	6–3½x4	BL 214	U 4	No	Tim 53200H	SF	H	5.14	32.9	6x2¾x¼	C
99	.....15A	1½–2	1390	144	165	8000	3250	P30x5	P32x6	Con 17E	6–3½x4	BL 214	U 4	No	Tim 52200H	SF	H	5.83	37.4	6x2¾x¼	C
100	.....22A	2	1945	156	162	13200	4000	P32x6	DP32x6	Con 16C	6–4x4½	BL 314	U 4	No	Tim 54200H	SF	R	5.83	38.6	6x2¾x¼	C
101	.....30A	3	2495	160	190	16800	5800	P34x7	DP34x7	Con 16R	6–4x4½	BL 314	U 4	No	Tim 56200H	SF	R	6.16	40.6	7½x2½x⅄	C
102	.....31A	3	2975	160	190	16800	5800	P34x7	DP34x7	Con E600	6–3¼x4½	BL 334	U 4	No	Tim 56200H	SF	R	6.16	40.6	7½x2½x⅄	C
103	.....61A	3½	3750	155	190	16800	5600	P34x7	DP34x7	Con 16R	6–4x4½	BL 334	U 4	No	Tim 58200H	SF	R	6.16	32.9	6½x2½x⅄	C
104	.....80A	4	4500	146	190	21600	6900	P36x8	DP36x8	Con 18R	6–4x4½	BL 55	U 7	No	Tim65720TW	SF	R	7.75	73.6	7½x2½x⅄	C
105	.....100A	5	4600	168	200	21600	8300	P36x8	DP36x8	Con 21R	6–4¾x4¾	BL 60	U 7	No	Tim 66720W	SF	R	8.2	77.9	8x2½x⅄	C
106	.....105A	5	5300	168	200	25000	8400	P36x8	DP38x9	Con 21R	6–4¾x4¾	BL 60	U 7	No	Tim68720TW	SF	R	8.75	83.1	8x2½x⅄	C
107	Ford Comm.....	.....	320	106	106	.....	1688	B5.25/18	B5.25/18	Own A	4–3⅞x4¼	Own	U 3	No	Own	S¾	U	3.7	11.7	.....	C
108	Truck.....	1½	470	131	131	.....	2864	B6.00/20	P32x6	Own	4–3⅞x4¼	Own	U 4	No	Own	S¾	U	6.6	42.2	7x2¾x⅄	C
109	Truck.....	1½	500	157	157	.....	3140	B6.00/20	P32x6	Own	4–3⅞x4¾	Own	U 4	No	Own	S¾	U	6.6	42.2	7x2¾x⅄	C
110	FWD.....H4	1½–2	3325	120	160	11000	5300	P34x7	P34x7	Wis SU	4–4x5	Cot A	A 4	Op	Own H	BF	H	7.86	38.0	5⅄x2¼x⅄	C
111	.....H6	2–2½	3385	133	160	13000	5900	P9.00/20	P9.00/20	Wau MS	6–3¾x4¾	BL 51	U 4	No	Own H	BF	H	8.92	47.7	5⅄x2¼x⅄	C
112	.....HH-6	2½–3	4135	138	170	15000	6400	P9.75/20	P9.75/20	Wau MK	6–4⅛x4¾	BL 55	A 7	R 2	Own U	BF	H	6.95	84.7	5⅄x2¼x⅄	C
113	.....B3	3	4200	124	156	15500	6460	S36x6	S36x6	Own A	4–4¾x5½	Cot DAF	A 3	Op	Own B	BF	H	8.9	38.6	6⅄x2¼x⅄	C
114	.....CU-6	3½–4	4985	148	180	19500	8600	B10.50/20	B10.50/20	Wau SRS	6–4½x5½	Own U	A 5	Op	Own U	BF	H	8.9	88.6	7x3x⅄	C
115	.....CU6A	3½–4	4685	148	180	18500	7500	B10.50/20	DB10.50/20	Wau SKS	6–4½x5½	BL 615	U 5	Op	Own U	BF	H	6.72	55.2	7x3x⅄	C
116	.....SSU	4–5	5135	148	Op	22000	8900	B11.25/20	B11.25/20	Wau SRL	6–4¾x5½	Own U	A 5	Op	Own U	BF	H	8.9	88.6	7x3x⅄	C
117	.....SSUA	4–5	4835	148	Op	21000	8100	B11.25/20	B11.25/20	Wau SRL	6–4½x5½	BL 706	U 5	Op	Own M	BF	H	7.35	73	7x3x⅄	C
118	.....M5	5–7½	7400	165	195	29500	11800	B12.75/20	B12.75/20	Wau SRK	6–4¾x5½	BL 714	U 4	A 2	Own M	2F	H	10.0	207.	8x3x⅄	C
119	.....MF6	5–6	5735	148	Op	24500	9300	B10.50/20	DB10.50/20	Wau SRK	6–4⅝x5½	O–n U	A 5	Op	Own M	BF	H	8.9	88.6	8x3x⅄	C
120	.....LBU	3–6	4800	Op	Op	23500	9000	B9.00/20	DB9.00/20	Wau SRS	6–4½x5½	BL 55	U 4	Op	Own U	D	H	7 35	39.5	7x3x⅄	C
121	.....M7	7½–10	8500	165	Op	37000	13000	P40x10	DP40x10	Wau RB	6–5x5¾	BL 714	U 4	A 2	Wis 131W	2F	H	8.36	173.	10x3x⅄	C
122	Garford.....40Z	2½	3240	168	185	12500	5100	P36x6	DP36x6	Bud DW6	6–3¾x5	Fu MGU14	U 4	No	Tim 63702	WF	R	6.5	34.8	6x3x¼	C
123	(cont'd).....S11Z	2	2030	162	192	10000	4500	P32x6	DP32x6	Bud HS6	6–3⅝x4½	BL 20	U 4	No	Tim 54000	SF	R	5.83	29.2	6x2½x⅄	C

Line Number	ENGINE DETAILS: Piston Displacement	Compression Ratio	Torque lb. ft.	N.A.C.C. Rated H.P.	Max. Brake H.P. at R.P.M. Given	Valve Arrangement	Camshaft Drive	Piston Material	MAIN BEARINGS: Number and Diameter	Length	Oiling System Type	Governor Make	FUEL SYST.: Carburetors Make	Fuel Feed	ELECTRICAL: Ignition System Make	Generator, Starter Make	Clutch Type and Make	Radiator Make	Universals Make	FRONT AXLE: Make and Model	Steering Gear Make	BRAKES: SERVICE: Make, Location Type, Operation	Lining Area	Drum Material	Hand Type, Location	BODY MOUNTING DATA: Cab to Rear of Frame	Cab to Rear Axle	Width of Frame	SPRINGS: Front	Rear	Auxiliary Type
1	248	5.0	150	27.3	70-3200	L	C	C	7-2⅜	10 5/32	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 30020H	Ros	L4IHV	380	p	TX	(3)	(3)	34	38x2¼	50x2½	½
2	288	4.6	180	32.6	72-2500	L	C	C	7-2⅝	11 11/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 31000H	Ros	L4IHV	452	a	TX	(3)	(3)	34	38x2¼	54x3	½
3	360	4.4	240	40.8	88-2500	L	C	C	7-2¾	11 11/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IHV	578	a	TD	(3)	(3)	34	40x2½	54x3	½
4	381	4.2	236	40.8	88-2400	H	C	C	7-2¾	13 5/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IHV	660	a	TD	(3)	(3)	34	40x2½	54x3	½
5	500	4.2	340	48.6	121-2400	H	C	A	7-2¾	13 5/16	FP	No	Zen	M	DR	DR	D.BL	Pe	Spi	Tim 35000A	Ros	L4IHV	768	a	TD	(3)	(3)	34	40x2½	54x3	½
6	611	4.5	384	54.1	127-2300	L	G	A	7-3	13 11/16	FP	No	Zen	M	DR	DR	dpBL	Pe	Spi	Tim 26450W	Ros	Ws4IA	921	a	TD	(3)	(3)	34	46x3	60x3½	½
7	260	4.4	152	29.4	65-2400	L	G	A	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	D.Fu	Ch	Spi	Tim 30000	Ros	L4IH	380	a	TX	144	60	34	38x2½	52x2½	½
8	298	4.4	190	33.7	69-2400	L	G	A	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	D.Fu	Ch	Spi	Tim 31000	Ros	L4IH	452	a	TX	156	66	34	38x2½	54½x3	½
9	339	4.4	212	38.4	76-2400	L	G	A	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	D Fu	Ch	Spi	Tim 31000	Ros	L4IH	260	a	TX	156	66	34	38x2½	54½x3	½
10	360	4.4	230	40.3	82-2400	L	G	A	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	D.Fu	Ch	Spi	Tim 33000	Ros	L4IH	394	a	CD	168	72	34	38x2½	54½x3	½
11	453	4.7	300	48.6	98-2200	L	G	A	7-3	13¼	PC	Ha	Zen	M	DR	DR	D.Fu	Ch	Sol	Tim 35000	Ros	L4IH	768	a	CD	192	84	34	45x3	54½x3	½
12	529	4.7	350	51.3	114-2200	L	G	A	7-3	14	PC	Ha	Zen	M	DR	DR	D.Fu	Ch	Sol	Tim 27450	Ros	L4IH	921	a	CD	216	72	34	46x3	52x4	½
13	707	4.5	450	60.	150-2000	L	G	A	7-3½	12½	PC	Ha	Zen	M	DR	DR	P.BL	Ch	Sol	Tim 27450	Ros	W4A	921	a	CD	108	33	34	46x3	52x4	½
14	707	4.5	450	60.	150-2000	L	G	A	7-3½	15¼	PC	Ha	Zen	M	DR	DR	P.BL	Ch	Sol	Tim 27450	Ros	W4A	921	a	CD	......	......	34	46x3	None	½
15	384	4.5	262	43.3	90-2200	L	G	A	7-3½	15¼	PC	Ha	Zen	M	DR	DR	D.Fu	Ch	Sol	Wis F211	Ros	L2IH	433	a	CD	168	72	34	45x3	54½x3	½
16	529	4.5	350	51.3	114-2000	L	G	A	7-3	14	PC	Ha	Zen	M	DR	DR	P.Fu	Ch	Sol	Wis F311	Ros	L2IH	542	a	CD	192	84	34	45x3	54½x3	½
17	214	4.9	142	27.3	71-3200	L	C	A	4-2⅜	6⅜	FP	No	Zen	M	DR	DR	P.BB	GO	Spi	Tim 30000H	Ros	L4IH	269	a	TX	106½	58½	34	40x2¼	54x2½	½
18	248	5.0	160	27.3	70-3200	L	C	C	7-2⅜	10 5/32	FP	No	Zen	M	DR	DR	P.BB	Pe	Spi	Tim 30000H	Ros	L4IH	269	a	TX	105	57	34	40x2¼	54x2½	½
19	248	5.0	160	27.3	70-3200	L	C	C	7-2⅜	10 5/32	FP	No	Zen	M	DR	DR	P.BB	Pe	Spi	Tim 31000H	Ros	L4IH	281	a	TX	135	78½	33½	40x2¼	54x3	½
20	311	4.2	196	38.4	73-2400	H	C	N	7-2¾	13 5/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	im 33000H	Ros	L4IH	353	a	TX	124½	69	33½	40x2¼	56x3	½
21	339	4.2	212	38.4	82-2400	H	C	N	7-2¾	13 5/16	FP	Ha	Zen	M	DR	DR	D.BL	Pe	Spi	Tim 33000H	Ros	L4IH	394	a	DX	132	80½	34	42x2½	56x3	½
22	339	4.2	212	38.4	81-2400	H	C	N	7-2¾	13 5/16	FP	Ha	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35000H	Ros	L4IHV	483	a	DX	132	80½	34	42x2½	56x3	½
23	427	4.2	267	45.9	100-2600	H	C	N	7-2¾	13 5/16	FP	Ha	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 26450	Ros	L4IHV	692	a	DX	132	78	33	48x3	60x3½	½
24	228	4.4	143	27.3	60-2800	L	G	C	7-2½	10 11/16	PC	No	Zen	M	AL	AL	P.BB	GO	Spi	Cla F208A	Ros	L4IH	186	a	TX	93	51½	34	42x2	50x2½	½
25	228	4.4	143	27.3	60-2800	L	G	C	7-2½	10 11/16	PC	No	Zen	M	AL	AL	P.BB	GO	Spi	Cla F212A	Ros	L4IH	186	a	TX	93	51½	34	42x2	50x2½	½
26	228	4.4	143	27.3	60-2800	L	G	C	7-2½	10 11/16	PC	No	Zen	M	AL	AL	P.BB	GO	Spi	Cla F212A	Ros	L4IH	219	a	TX	96	54	34	42x2½	53x2½	½
27	263	4.4	164	31.5	68-2800	L	G	A	7-2½	10 11/16	PC	No	Zen	M	AL	AL	P.BB.	GO	Spi	Cla F308	Ros	L4IH	350	a	TX	126	72	34	42x2½	53x2½	½
28	282	4.4	...	33.7	76-2800	L	G	A	7-2½	10 11/16	PC	No	Zen	M	AL	AL	P.BB	GO	Spi	Cla F308	Ros	L4IH	350	a	TD	126	72	34	42x2½	53x2½	½
29	298	4.7	225	33.7	100-2800	L	G	C	7-2⅝	13¼	PC	Ha	Zen	M	AL	AL	P.BB.	GO	Spi	Cla F308	Ros	L4IHV	350	a	TD	117	74⅝	34	45¼x2½	56x3	½
30	339	4.7	225	38.4	100-2800	L	G	C	7-2⅝	13¼	PC	Ha	Zen	M	LN	LN	P.BB	GO	Spi	Cla F308	Ros	L4IHV	350	a	TD	Opt	113⅝	34	45¼x2½	56x3	½
31	339	4.4	212	38.4	76-2400	L	G	C	7-2⅝	13¼	PC	Ha	Zen	M	AL	AL	D.Co	GO	Spi	Shu 5582B	Ros	L4IHV	408	pa	TD	126	80⅛	34	45¼x2½	56x3	½
32	384	4.4	262	43.3	90-2200	L	G	C	7-2⅝	13¼	PC	Ha	Zen	M	LN	LN	D.Co	GO	Spi	Shu 5582B	Ros	L4IHV	408	pa	TD	138	87⅝	34	45¼x2½	56x3	½
33	428	4.4	280	45.9	93-2200	L	G	C	7-3	14	PC	Ha	Zen	M	AL	AL	D.Co	GO	Spi	Shu 5582B	Ros	L4IHV	499	a	TD	120	79½	34	45¼x2½	56x3	½
34	501	4.4	330	48.6	111-2200	L	G	C	7-3	12½	PC	Ha	Zen	M	LN	LN	D.Co	GO	Spi	Shu 5582B	Ros	L4IHV	499	a	TD	138	88	34	45¼x2½	56x3	½
35	339	4.7	225	38.4	100-2800	L	G	C	7-2⅝	13¼	PC	Ha	Zen	M	AL	AL	D.Co	GO	Spi	Shu 5582B	Ros	L4IHV	410	pa	TD	114	71⅝	34	45¼x2½	56x3	½
36	529	4.4	350	51.3	114-2200	L	G	C	7-3	12½	PC	Ha	Zen	M	AL	AL	D.Co	GO	Spi	Shu 678	Ros	Ws 4IA	552	a	TD	138	89¼	34	46x3	56x3½	½
37	299	4.9	198	33.7	85-2800	L	G	C	4-2⅝	9⅛	PC	Mo	Til	M	AL	AL	D.BL	Pe	Blo	Tim 33000H	Ros	L4IHV	375	a	FD	120	77¼	34	42x2¼	50x3	½
38	196	4.6	124	21.0	48-2800	L	G	A	3-2¼	6⅛	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	121	p	TX	53⅞	26⅝	42 11/16	35½x1¾	53½x1 11/16	N
39	211	5.3	134	25.3	60-3100	L	C	S	4-2¼	6¼	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	121	p	TX	53⅞	26⅝	42 11/16	35½x1¾	53½x1 11/16	N
40	196	4.6	124	21.0	48-2800	L	G	S	3-2¼	6⅛	CC	No	Car	V	DR	DR	P.BB	Fe	Own	Own	Ha	O4IH	189	p	TX	66⅞	31	37⅞	39x2	48x2½	N
41	208	5.1	132	27.3	63-3200	L	C	S	7-2⅜	10 11/16	CC	No	Zen	V	NE	NE	P.BB	Fe	Own	Own	Ha	O4IH	189	p	TX	66⅞	31	37⅞	39x2	48x2½	N
42	196	4.6	124	21.0	48-2800	L	G	A	3-2¼	6⅛	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	175	a	TX	91½	50½	34	36x1¾	48x2¼	N
43	211	5.3	134	25.3	60-3100	L	C	S	4-2¼	6¼	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	175	a	TX	91½	50½	34	36x1¾	48x2¼	N
44	196	4.6	124	21.0	48-2800	L	G	S	3-2¼	6⅛	CC	Ha	Car	V	DR	DR	P.BB	Fe	Own	Own	Ha	O4IH	206	p	TX	85⅞	50	37⅞	39x2	48x2½	N
45	208	5.1	132	25.3	63-3200	L	C	S	7-2⅜	10 11/16	CC	Ha	Zen	V	NE	NE	P.BB	Fe	Own	Own	Ha	O4IH	206	p	TX	85⅞	50	37⅞	39x2	48x2½	N
46	196	4.6	124	25.3	48-2800	L	G	A	3-2¼	6⅛	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	175	a	TX	91½	50½	34	86x1¾	48x2¼	N
47	211	5.3	134	21.0	60-3100	L	C	S	4-2¼	6¼	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	175	a	TX	91½	50½	34	36x1¾	48x2¼	N
48	217	5.8	144	25.3	75-3200	L	C	S	4-2¼	6¼	CC	Ha	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	229	a	TX	145	84 11/32	38 5/16	39x2	48x2½	½
49	196	4.6	124	27.3	48-2800	L	G	A	3-2¼	6⅛	CC	No	Car	M	DR	DR	P.BB	Lo	Own	Own	Own	O4IH	187	a	TX	88⅜	52⅜	37⅞	39x2	48x2½	N
50	211	5.2	134	31.5	60-3100	L	C	S	4-2¼	6¼	CC	No	Car	M	DR	DR	P.BB	Lo	Own	Own	Own	O4IH	187	a	TX	88⅜	52⅜	37⅞	39x2	48x2½	N
51	208	5.1	132	27.3	63-3200	L	C	S	7-2⅜	10 11/16	CC	Ha	Zen	M	DR	DR	P.BB	Fe	Own	Own	Ha	O4IH	305	a	TX	119 5/16	62¾	34	40x2½	56x3	N
52	309	4.7	200	31.5	96-3000	L	G	S	7-2⅝	11¾	CC	Ha	Ste	M	DR	DR	P.BB	Lo	Own	Own	Jac	O4IH	350	a	CD	124 11/16	69¾	33 11/16	42x3	56½x3½	½
53	241	5.3	167	39.2	78-3000	L	C	S	7-2 5/16 r	11	CC	KP	Zen	V	NE	NE	P.BB	Lo	Own	Own	Ha	O4IH	382	p	TX	82¼	54¾	34	39x2½	45x3	N
54	309	4.7	200	21.0	96-3000	L	G	S	7-2⅝	11¾	CC	Ha	Ste	M	DR	DR	P.BB	Fe	Own	Own	Jac	O4IHV	416	a	CD	149 11/16	89¼	34	42x3	56x3½	½
55	384	5.0	262	25.3	115-3000	L	G	S	9-2¾	13	CC	Ha	Str	M	DR	DR	P.BB	Fe	Own	Own	Jac	BWs4IA	650	a	CD	149 11/16	89¾	34 5/16	42x3	56x3½	½
56	214	5.0	135	27.3	61-3000	L	G	C	7-2½	10½	FP	No	Zen	M	AL	AL	P.BB	Mo	MM	Cla F208	Ros	L4IH	377	p	FX	96	58¾	34	39¼x2	49x2½	½
57	226	4.0	136	22.5	36-1800	L	G	C	3-2⅛	7 11/16	PC	Bu	Zen	E	LN	LN	D.Fu	Ow	Blo	Shu 510	Ros	W2IM	538	a	2I	110	72	31	46x2½	52x2½	½
58	241	4.5	143	27.3	57-2500	L	G	C	4-2⅜	8	PC	Bu	Zen	E	LN	LN	D.Fu	Ow	Blo	Shu 510	Ros	W2IM	538	a	2I	110	72	31	46x2½	52x2½	½
59	263	4.2	156	25.6	43-2000	L	G	C	3-2⅛	9 5/16	PC	Bu	Zen	E	LN	LN	D.Fu	Ow	Blo	Shu 510	Ros	W2IM	538	a	CX	144	88	31	46x2½	52x2½	½
60	331	4.5	200	33.7	73-2400	L	G	C	4-2½	9	PC	Bu	Zen	E	LN	LN	D.Fu	Ow	Blo	Shu 510	Ros	W2IM	538	a	CX	144	88	31	46x2½	52x2½	½
61	312	4.0	174	28.9	49-1900	L	G	C	3-2⅜	10 5/16	PC	Bu	Zen	E	LN	LN	D.Fu	Ow	Blo	Shu 5550	Ros	W2IM	538	a	CX	192	104	31	46x2½	54x3	½
62	331	4.5	200	33.7	73-2400	L	G	C	4-2½	9	PC	Bu	Zen	E	LN	LN	D.Fu	Ow	Blo	Shu 5550	Ros	W2IMV	538	a	CX	192	104	31	46x2½	54x3	½
63	381	4.1	222	32.4	50-1400	L	G	C	3-2⅜	9 11/16	PC	Bu	Zen	E	LN	LN	D.Fu	Ow	Blo	Shu 5550	Ros	W2IMV	503	a	CX	168	98	31	45x3	54x3	½
64	386	4.3	230	38.4	78-2300	L	G	C	4-2½	9⅞	PC	Bu	Zen	E	LN	LN	D.Fu	Ow	Blo	Shu 5550	Ros	W2IMV	503	a	CX	168	98	31	45x3	54x3	½
65	411	4.7	280	40.8	83-2100	L	G	C	4-2½	9⅞	PC	Bu	Zen	E	LN	LN	D.Fu	Ow	Blo	Shu 615	Ros	W2IMV	503	a	CX	223	121	31	45x3	54x4	½
66	510	3.9	302	40.0	61-1400	L	G	C	3-2⅝	12 11/16	PC	Bu	Zen	E	LN	LN	D.Fu	Ow	Blo	Shu 615	Ros	W2IMV	503	a	CX	216	130	36	45x3	54x4	½
67	572	4.3	358	48.6	114-1900	L	G	C	4-3	10 5/16	PC	Bu	Zen	E	LN	LN	D.Fu	Ow	Blo	Shu 650	Ros	W2IM	538	a	CX	156	108	36	48x3	54x4	½
68	226	4.5	136	22.5	37-1800	L	G	C	3-3	8	PS	No	Zen	V	AL	AL	D.BL	Mo	Cle	Shu 5410	Ros	T2IM	326	...	2I	Opt	69	34	39x2½	50x2½	N
69	241	4.5	150	27.3	57-2500	L	G	C	4-2 11/16	8 11/16	FP	No	Zen	V	AL	AL	D.BL	Mo	Cle	Shu 5410	Ros	T2IM	326	...	2I	Opt	63	34	39x2½	50x2½	N
70	330	4.5	213	33.7	61-2100	L	G	C	4-2⅞ r	9	FP	No	Str	V	AL	AL	D.BL	Mo	Cle	Shu 5510	Ros	L4IHV	665	a	TD	Opt	80	34	39x2½	50x2½	N
71	312	4.5	174	28.9	57-2100	L	G	C	3-3 11/16 r	10 5/32	PS	No	Zen	V	El	AL	D.BL	Mo	Cle	Shu 5550	Ros	T2IM	495	a	2	Opt	86	34	39x2½	52x3	N
72	312	4.5	174	28.9	57-2100	L	G	C	3-2⅝	10 5/32	PS	No	Zen	V	El	AL	D.BL	Lo	Pet	Own ECZ	Wo	OP4M	100	a	TX	Opt	81	39 5/16	44x3	44x3	N
73	428	4.5	280	45.9	102-2400	L	G	C	7-3r	9⅞	FP	No	Zen	M	AL	AL	D.BL	Mo	Cle	Shu 5550	Ros	L4IHV	775	a	TD	Opt	80	34	39x2½	52x3	½
74	525	4.5	348	48.6	111-2200	L	G	C	7-3	11½	PS	Mo	Str	P	AL	AL	D.BL	Yo	Pet	Shu 637	Ros	L4IHV	855	a	TD	Opt	80	34	39½x3	52x3½	½
75	572	4.5	358	48.6	105-2200	L	G	C	4-3	10 5/16	FP	Mo	Str	V	AL	AL	D.BL	Mo	Cle	Shu 655	Ros	T2IA	495	a	....	Opt	89	38⅛	42x3	56x4	N
76	200	4.7	126	24.0	50-2700	L	C	A	3-2⅛	5⅞	CC	No	Zen	M	DR	DR	P.BB	Lo	Cle	Cla F212	Ge	L4IH	191	P	TX	103	51⅛	34	38½x2¼	50x2½	N
77	215	4.9	142	27.3	72-3400	L	C	A	4-2⅜	6⅜	CC	No	Zen	M	DR	DR	P.BB	Lo	Cle	Cla F212	Ge	L4IH	191	P	TX	103	51⅛	34	38½x2¼	50x2½	N
78	248	5.0	150	27.3	64-2600	L	C	A	7-2⅜	10 5/32	CC	KP	Zen	M	DR	DR	P.BB	Lo	Cle	Tim 11704H	Ge	L4IH	247	P	TI	95	51	34	38x2¼	50x2½	N
79	248	5.0	150	27.3	64-2600	L	C	A	7-2⅜	10 5/32	CC	KP	Zen	M	DR	DR	P.BB	Lo	Cle	Tim 31020H	Ge	L4IH	269	P	TI	95	51	34	38x2¼	50x2½	½
80	215	4.9	142	27.3	72-3400	L	C	A	4-2⅜	6⅜	CC	No	Zen	M	DR	DR	P.BB	Lo	Cle	Tim 31020H	Ge	L4IH	269	P	TI	95	51	34	38x2¼	50x2½	½
81	248	5.0	150	27.3	64-2600	L	C	A	7-2⅜	10 5/32	CC	KP	Zen	V	DR	DR	P.BB	Lo	PS	Cla F304	Ros	L4IH	270	a	TI	119	71	34	40x2¼	52x3	½
82	248	5.0	150	27.3	64-2600	L	C	A	7-2⅜	10 5/32	CC	KP	Zen	V	DR	DR	P.BB	Lo	PS	Cla F304	Ros	L4IHV	379	a	TI	119	71	34	40x2¼	51¾x3	½
83	248	5.0	150	27.3	64-2600	L	C	A	7-2⅜	10 5/32	CC	KP	Zen	V	DR	DR	P.BB	Lo	PS	Cla F304	Ros	L4IHV	379	a	TI	119	71	34	40x2¼	51¾x3	½
84	251	4.1	162	25.6	50-2000	L	G	C	3-2⅜	7½	CC	Wa	Zen	V	DR	DR	P.BB	Lo	PS	Own 7720	Ros	L4IH	337	a	TI	119	71	34	38x2½	52x3	½
85	251	4.1	162	25.6	50-2000	L	G	C	3-2⅜	7½	CC	Wa	Zen	V	DR	DR	P.BB	Lo	PS	Own 7720	Ros	L4IHV	379	a	TI	119	71	34	38x2½	51¾x3	½
86	311	4.2	196	38.4	75-2200	H	C	C	7-2¾	13 5/16	FP	KP	Zen	M	DR	DR	P.BB	Lo	PS	Own 7738	Ros	L4IHV	379	a	TI	117	79	34	42x2½	54x3	½
87	311	4.2	196	38.4	75-2200	H	C	C	7-2¾	13 5/16	FP	KP	Zen	M	DR	DR	P.BB	Lo	PS	Own 7738	Ros	L4IHV	379	a	TI	117	79	34	42x2½	54x3	½
88	288	4.6	181	32.6	73-2600	L	G	C	7-2⅝	11 11/16	CC	KP	Zen	M	DR	DR	P.BB	Lo	PS	Cla F304	Ros	L4IH	270	a	TI	113	71	34	40x2¼	52x3	½
89	288	4.6	181	32.6	73-2600	L	G	C	7-2⅝	11 11/16	CC	KP	Zen	M	DR	DR	P.BB	Lo	PS	Cla F318	Ros	L4IHV	379	a	TI	113	71	34	40x2¼	52x3	½
90	288	4.6	181	32.6	73-2600	L	G	C	7-2⅝	11 11/16	CC	KP	Zen	M	DR	DR	P.BB	Lo	PS	Cla F318	Ros	L4IHV	379	a	TI	113	71	34	40x2¼	52x3	½
91	381	4.2	237	40.8	85-2200	H	C	C	7-2¾	13 5/16	FP	KP	Zen	M	DR	DR	P.BB	Lo	Spi	Own 7720	Ros	L4IHV	465	a	TD	117	79	34	42x2½	54x3	½
92	428	4.2	268	45.9	100-2200	H	C	C	7-2¾	13 5/16	FP	KP	Zen	M	DR	DR	P.BB	Lo	Spi	Tim 36020H	Ha	L4IHV	513	a	TD	162	102	34	42x3	56x3½	½
93	428	4.2	268	45.9	100-2200	H	C	C	7-2¾	13 5/16	FP	KP	Zen	M	DR	DR	P.BB	Lo	Spi	Tim 36020W	Ha	W4IA	623	a	TD	162	102	34	42x3	56x3½	½
94	471	3.7	288	40.0	61-1350	L	G	C	3-2⅝	11⅛	FP	Pe	Zen	V	AB	DR	P.BB	Lo	PS	Own 5008	Ge	T2IMV	568	a	RI	151	87	38	44x3	56x3½	½
95	428	4.2	268	45.9	100-2200	H	C	C	7-2¾	13 5/16	FP	KP	Zen	M	DR	DR	P.BB	Lo	PS	Own 5008	Ros	T2IMV	458	a	RI	151	87	38	44x3	56x3½	½
96	200	4.7	126	24.0	49-2800	L	C	A	3-2⅛	5⅞	FP	No	Zen	M	AL	AL	P.Lo	Lo	Spi	Sal F	Ros	L4IH	257	a	TX	84	47½	32	40x2	54x2½	N
97	227	4.6	152	26.8	52-2400	L	C	A	3-2⅛	5⅞	FP	No	Zen	M	AL	AL	P.Lo	Lo	Spi	Tim 11703H	Ros	L4IH	225	a	TX	88	54½	32	40x2	54x2½	N
98	214	5.0	138	27.3	61-3000	L	C	A	7-2⅛	9 11/16	FP	No	Zen	M	AL	AL	P.BL	Lo	Spi	Tim 30000H	Ros	L4IH	259	a	TX	108	60½	32	40x2	54x2½	N
99	214	5.0	138	27.3	61-3000	L	C	A	7-2⅛	9 11/16	FP	No	Zen	M	AL	AL	P.BL	Lo	Spi	Tim 11703H	Ros	L4IH	380	a	TX	106	68½	32	40x2	54x2½	N
100	248	5.0	150	27.3	66-3200	L	C	A	7-2⅜	10 5/32	FP	No	Zen	M	AL	AL	P.BL	Lo	Spi	Tim 31000H	Ros	L4IH	380	a	TX	130	80½	32	40x2	54x3	N
101	311	4.1	196	38.4	73-2400	H	C	C	7-2¾	13 11/16	FP	Ha	Zen	M	DR	DR	P.BL	Lo	Spi	Tim 33000H	Ros	L4IH	577	a	TX	120	74	34	43x2½	54x3	½
102	288	4.1	180	32.6	73-2700	L	C	C	7-2⅝	12 5/16	FP	Ha	Zen	M	DR	DR	D.BL	Lo	Spi	Tim 33000H	Ros	L4IH	660	a	CD	120	74	34	43x2½	54x3	½
103	311	4.1	193	38.4	73-2400	H	C	C	7-2¾	13 11/16	FP	Ha	Zen	M	DR	DR	D.BL	Lo	Spi	Tim 33000H	Ros	L4IH	660	a	CD	144	79	32	43x2½	54x3	½
104	339	4.1	212	38.4	80-2400	H	C	C	7-2¾	13 5/16	FP	Ha	Zen	M	DR	DR	D.BL	Lo	Spi	Tim 35100Tw	Ros	W4IA	768	a	CD	126	69	32	43x2½	54x3	½
105	428	4.1	268	45.9	100-2600	H	C	C	7-2¾	13 5/16	FP	Ha	Zen	M	DR	DR	D.BL	Lo	Spi	Tim 35100Tw	Ros	W4IA	768	a	CD	144	94	38	46x3	54x4	½
106	428	4.1	268	45.9	100-2600	H	C	C	7-2¾	13 5/16	FP	Ha	Zen	M	DR	DR	D.BL	Lo	Spi	Tim 27450Tw	Ros	W4IA	820	a	CD	144	94	38	46x3	54x4	½
107	200	4.6	128	24.0	50-2800	L	G	A	3-2	2	PG	No	Zen	P	Ow	Ow	D.Ow	Ow	Spi	Own	Own	O4IM	186	a	4I	.....	25⅞	....	30 11/16x	39½x	N
108	200	4.6	128	24.0	50-2800	L	G	A	3-2	2	PG	No	Zen	P	Ow	Ow	P.Lo	Ow	Spi	Own	Own	O4IM	475	a	2I	94⅝	51 5/16	38 7/16	30⅝x2¼	50x2½	O
109	200	4.6	128	24.0	50-2800	L	G	A	3-2	3	PG	No	Zen	P	Ow	Ow	P.Lo	Ow	Spi	Own	Own	O4IM	475	a	2I	94⅝	76 11/16	38 7/16	30⅝x2¼	50x2½	O
110	251	4.5	160	25.6	50-2000	H	G	C	3-2 5/16 r	8	PC	No	Zen	V	AL	AL	D.DG	Pe	Blo	Own H	Ros	O4M	238	G	2I	112	81	36	42¾x2½	52¾x2½	½
111	315	4.5	200	33.7	72-2500	L	G	C	7-2⅝	12⅜	PC	Wa	Zen	V	NE	NE	D.BL	Pe	Blo	Own H	Ros	O4XM	252	G	2I	115½	81½	36	42¾x2½	52¾x2½	½
112	381	4.5	240	40.8	85-2400	L	G	C	7-2⅝	12⅜	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Own U	Ros	O4XM	238	G	2I	126	86	36	42¾x2½	52¾x2½	½
113	398	4.0	210	36.1	56-1350	T	G	C	3-2	12	PC	Pe	Str	G	NE	NE	O.ME	Mc	Blo	Own B	Ros	O4IM	238	G	2I	130	93	36	42¾x2½	52¾x2½	N
114	411	4.6	265	40.8	91-2300	L	G	C	7-3	13⅞	PC	Wa	Zen	M	NE	NE	O.HS	Pe	Blo	Own U	Ros	O4XM	238	G	2I	132	93	36	42¾x2½	52¾x2½	N
115	411	4.6	265	40.8	91-2300	L	G	C	7-3	13⅞	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Own U	Ha	O4IM	238	G	4X	132	93	36	42¾x2½	52¾x2½	½
116	462	4.5	300	45.9	102-2400	L	G	C	7-3	13⅞	PC	Wa	Zen	V	NE	NE	O.HS	Pe	Blo	Own M	Ros	O4XM	238	G	2I	132	93	36	42¾x2½	52¾x2½	½
117	462	4.5	300	45.9	102-2400	L	G	C	7-3	13⅞	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Own M	Ha	O4XM	238	G	2I	132	93	36	42¾x2½	52¾x2½	N
118	517	4.6	330	51.3	110-2300	L	G	C	7-3	13⅞	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Wis 131F	Ros	B4IMV	324	G	T4	153½	110½	34	48x3½	52x4	½
119	517	4.6	330	51.3	110-2300	L	G	C	7-3	13⅞	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Own M	Ros	O4TB	722	G	4X	132	93	36	42¾x2½	54¾x2½	½
120	411	4.6	265	40.8	91-2300	L	G	C	7-3	13⅞	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Own U	Ros	O4IM	722	G	4D	Opt	Opt	42	42¾x2½	52x4	N
121	677	4.4	460	60.	125-2000	L	G	C	4-3½	11⅜	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Wis 131F	Ros	B4IMV	324	G	T4	153½	110½	34	48x3½	52x4	N
122	331	4.5	202	33.7	64-2100	L	G	C	4-2½	7⅞	PC	No	Zen	V	AL	AL	D.Fu	Lo	Blo	Tim 35000H	Ha	L4IH	394	a	FX	144	90	34	40x2¼	54x3	½
123	241	4.5	143	27.3	53-2200	L	G	C	4-2⅜	8	PC	No	Zen	V	AL	AL	D.BL	Lo	Blo	Col 5530	Ha	L4IH	297	a	FX	133½	83	34	36x2¼	50x2½	½

Line Number	MAKE AND MODEL	GENERAL (See Keynote)						TIRE SIZE		MAJOR UNITS										FRAME	
										ENGINE		TRANSMISSION			REAR AXLE			GEAR RATIOS			
		Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight	Chassis Wt. (Stripped)	Front	Rear	Make and Model	No. of Cylinders Bore and Stroke	Make and Model	Location and Forward Speeds	Aux. Location and Speeds	Make and Model	Gear and Type	Drive and Torque	In High	In Low	Side Rail Dimensions	Type
1	Garford 60Z	3	4680	175	192	18000	7100	P36x6	DP38x7	Bud BA6	6-4⅛x5⅛	Fu VU	U 5	No	Tim 65706	WF	R	8.5	63.0	7x3½x¼	P
2	(concluded)... 80Z	4	5330	175	192	24000	8400	S36x6	S36x14	Bud BA6	6-4⅛x5⅛	BL 60-Max	A 7	No	Tim 66700	WF	R	10.3	98.2	8x3½x5/16	C
3	100Z	5	5830	175	192	30000	9600	S36x6	S.0x14	Bud BA6	6-4⅛x5⅛	BL 60-Max	A 7	No	Tim 68700	WF	R	10.1	95.0	8x3½x5/16	P
4	General Mot. (6) T15	½-1½	645	130	141	6500	2625	B5.50/20	B5.50/20	Own 200	6-3 5/16x3⅞	Own	U 3	No	Own	S½	H	4.86	16.1	6x2¼x3/16	TL
5	T18	1½-2	595	131	157	8200	2785	P30x5	P32x6	Own 200	6-3 5/16x3⅞	Own	U 4	No	Own	S½	U	5.43	35.7	6x2¼x5/32	TL
6	T19	1½-2½	745	130	164	10000	3110	B5.50/20	P32x6	Own 200	6-3 5/16x3⅞	Own	U 4	Op	Own	SF	H	6.2	40.7	6x2¼x3/16	TL
7	T25	1½-2	1200	130	152	9000	3375	B6.00/20	B7.50/20	Buick	6-3 5/16x4⅝	Own	U 4	No	Own	S½	H	5.83	29.6	6x2¼x3/16	TL
8	T23	2-3	745	131	157	10000	3080	B6.50/20	DB6.50/20	Own 200	6-3 5/16x3⅞	Own	U 4	No	Own	SF	H	6.2	40.7	6x2¼x5/32	TL
9	T26	2-3	1210	130	164	11000	3685	B6.50/20	B8.25/20	Own 257	6-3 5/16x4⅝	Own	U 4	No	Own	SF	H	5.67	35.7	6⅛x2¼x¼	TL
10	T30	2-3	1545	141	164	12500	4490	P30x5	DP30x5	Buick	6-3 5/16x4⅝	Own	U 4	No	Own	S½	H	5.63	28.6	6 3/16x3x5/32	TL
11	T31	2½-4	1695	141	181	14000	4695	P32x6	DP32x6	Own 257	6-3 5/16x4⅝	Own	U 4	No	Own	SF	H	5.63	35.5	6 3/16x3x5/32	TL
12	T42	2½-4	1845	141	181	15000	4725	P32x6	DP32x6	Buick	6-3 5/16x4⅝	Own	U 4	No	Own	S½	H	6.57	33.4	6 3/16x3x5/32	TL
13	T44	3-4½	2065	141	181	16000	5095	P34x7	DP34x7	Buick	6-3 5/16x4⅝	Own	U 4	No	Own	2½	R	8.05	40.9	6 3/16x3x5/32	TL
14	T45	3-4½	1865	141	181	16000	4910	P32x6	DP32x6	Own 257	6-3 5/16x4⅝	Own	U 4	No	Own	SF	R	6.57	41.4	6 3/16x3x5/32	TL
15	T51	4-5½	2465	155	.00	19000	5955	P34x7	DP34x7	Own 331	6-3¾x5	Own	U 4	No	Own	SF	R	6.57	40.6	9x3½x5/32	TL
16	T60	5-6½	3035	154	200	22000	6925	P34x7	DP34x7	Buick	6-3¾x5	Own	U 4	Op	Own	WF	R	8.50	52.5	9x3½x5/32	TL
17	T61	5-6½	3695	154	200	22000	7305	B9.00/20	DB9.00/20	Own 400	6-4⅛x5	Own	U 5	Op	Own	WF	R	8.50	69.9	9x3½x5/32	TL
18	T82	5-7	3795	155	201	24000	7500	B9.00/20	DB9.00/20	Own 331	6-3¾x5	Own	U 4	A 3	Own	WF	R	10.2	143	9x3½x5/32	TL
19	T83	5-7½	4190	155	201	25000	7690	B9 00/20	DB9.00/20	Own 400	6-4⅛x5	Own	U 5	Op	Own	WF	R	9.00	74.0	9x3½x5/32	TL
20	T85	6-8	5600	171	204	30000	10630	B9.75/20	DB9.75/20	Own 525	6-4½x5½	Own	U 4	Op	Own	2F	R	8.50	53.3	9 1/16x4x3/16	L
21	Gramm....... AX4	1-1½	795	131	157	8000	3350	B6.50/20	B6.50/20	Con W10	4-3⅞x4¼	WG TA	U 4	No	Tim 53200H	BF	H	5.66	36.3	6x2¾x¼	C
22	AX6	1-1½	895	131	157	8000	3550	B6.50/20	B6.50/20	Con 25A	6-3⅜x4	WG T9	U 4	No	Tim 53200H	BF	H	5.66	36.3	6x2¾x¼	C
23	BX4	1½-2	895	131	210	10000	3525	B6.00/20	DB6.00/20	Con W10	4-3⅞x4¼	WG T9	U 4	No	Tim 53200H	BF	H	6.2	39.6	6x2¾x¼	L
24	BX6	1½-2	995	131	210	10000	3725	B6.00/20	DB6.00/20	Con 25A	6-3⅜x4	WG T9	U 4	No	Tim 53200H	BF	H	6.2	39.6	6x2¾x¼	L
25	BXF	1½-2	1495	131	210	10000	4000	B6.00/20	DB6.00/20	Lyc ASD	6-3¾x4½	BL 314	U 4	No	Tim 53200	BF	H	5.6	37	6x2¾x¼	L
26	B	2-2½	1295	140	196	12000	4150	B6.50/20	DB6.50/20	Lyc 4SL	6-3¼x4½	Co A4J	U 4	No	Tim 54200H	BF	H	5.83	37.1	6x2½x¼	C
27	BF	2-3	1695	140	210	12000	4300	B6.50/20	DB6.50/20	Lyc ASD	6-3¾x4½	BL 314	U 4	No	Tim 54200	BF	H	5.8	37.1	6x2½x¼	C
28	CX4	2-3	1095	131	210	12000	3950	B6.50/20	DB6.50/20	Con W20	4-4⅛x4¼	WG T9	U 4	No	Tim 54200H	BF	H	5.8	37.0	10x2¾x¼	B
29	CX6	2-3	1295	131	210	12000	4150	B6.50/20	DB6.50/20	Con 16C	6-3⅜x4⅝	WG T9	U 4	No	Tim 54200H	BF	H	5.8	37.0	10x2¾x¼	B
30	C	2-3	1795	160	224	14000	4820	B7.00/20	DB7.00/20	Lyc AS	6-3⅝x4½	BL 314	U 4	No	Tim 54200 H	BF	H	5.8	37.1	7x2½x¼	C
31	CF	2-3½	1895	160	224	14000	4900	B7.50/20	DB7.50/20	Lyc ASD	6-3¾x4½	BL 314	U 4	No	Tim 54200	BF	H	5.8	37.1	7x2½x¼	C
32	CXF	2-3½	2395	160	224	14000	5100	B7.50/20	DB7.50/20	Con 20R	6-4⅛x4¾	BL 554	U 4	No	Tim 54200	BF	H	5.8	41.6	7x2½x¼	C
33	D	2½-4	1995	160	224	17000	5100	B7.50/20	DB7.50/20	Lyc ASD	6-3¾x4½	BL 314	U 4	No	Tim 56200H	BF	H	6.1	39.0	7x2½x¼	C
34	DF	2½-4	2695	160	260	17000	5300	B7.50/20	DB7.50/20	Con 21R	6-4⅜x4¾	BL 554	U 4	No	Tim 56200	BF	H	6.1	43.5	7x2½x¼	C
35	E330	3-4½	2595	160	224	20000	5950	B8.25/20	DB8.25/20	Lyc TS	6-3⅞x5	BL 554	U 4	No	Tim 58200H	BF	H	5.5	35.6	12x2½x¼	P
36	EY190	3	3595	190	190	16000	6750	B7.50/20	DB7.50/20	Con 20R	6-4⅛x4¾	Co Rus4	U 4	No	Tim 58200H	BF	H	4.5	29.1	8¾x3¼x¼	L
37	GY	4	4345	190	210	18000	7700	B8.25/20	DB8.25/20	Con 21R	6-4⅜x4¾	Co Rus	U 4	No	Wis 69317H	2F	H	4.3	27.9	8¾x3¼x¼	L
38	G	4-6	3695	150	225	24000	7950	B9.00/20	DB9.00/20	Con 21R	6-4⅜x4¾	BL 554	U 4	No	Wis 1237H	2F	H	6.8	49.0	12x2½x¼	P
39	GF	4-6	5500	150	225	24000	9050	B9.75/20	B9.75/20	Her HXC	6-5¼x6	BL 744	U 4	No	Wis 1237H	2F	H	4.29	15.8	12x2½x¼	P
40	GW	5-7½	5175	157	240	28000	9500	B9.00/20	DB9.00/20	Con 21R	6-4⅜x4¾	BL 554	U 4	No	Wis 1627KW	2F	H	6.3	41.0	7½x3x¼	P
41	GWD	5-7½	6495	157	240	30000	10000	B9.00/20	DB9.00/20	Cum H Die.	6-4⅞x6	BL 744	U 4	No	Wis 1737KW	2F	H	5.75	21.2	12x3x¼	P
42	HY	5	6595	210	236	22000	10100	B9 00/20	DB9.00/20	Con 16H	6-4¾x5¾	Fu HU16	U 4	No	Wis12527KW	2F	H	4.0	25.2	8¾x3¼x¼	L
43	G.-P. 35-6	1½-2	1535	156	160	12500	3800	B7.00/20	DB7.00/20	Lyc WTG	6-3x4¾	Fu MKU	U 4	No	Tim 53200H	SF	H	5.37	34.9	8x2½x¼	TL
44	(7) 45-6	2-3	2700	157	161	15500	4300	B7.50/20	DB7.50/20	Lyc SB	6-3⅜x4½	Fu MLU	U 4	No	Tim 54200H	SF	H	6.35	38.0	8x3x¼	TL
45	(7) 55-6	3-4	3185	154	191	19500	5900	B8.25/20	DB8.25/20	Lyc ASD	6-3¾x4½	Fu JVU	U 5	No	Tim 56200H	SF	H	7.25	55.0	9x3¼x5/32	TL
46	(7) 65-6	3½-5	3875	158	195	23500	7100	B9.00/20	DB9.00/20	Lyc TS	6-3⅞x5	Fu VUOG	U 5	No	Tim 58200H	SF	R	7.80	56.0	10x3½x5/32	TL
47	75-6	4-6	4915	154	191	28000	7400	B9.75/20	DB9.75/20	Wau SRL	6-4⅜x5⅛	Fu VUOG	U 5	No	Wis 1137H	2F	R	7.75	65.	11x3½x5/32	TL
48	75-8	4-6	4860	174	Op	28000	7500	B9.75/20	DB9.75/20	Lyc AEC	8-3¾x4¾	Fu VUOG	U 5	No	Wis 1137H	2F	R	7.25	51.2	11x3½x5/32	TL
49	85-6	5-7	6875	169	Op	28000	9200	B10.50/20	DB10.50/20	Wau 6AB	6-4½x5¾	Fu MHU	U 4	A	Wis 1567W	2F	R	9.00	113.	12x3½x5/32	TL
50	95-6	7-10	7850	159	196	31000	10400	B10.50/24	DB10.50/24	Wau 6RB	6-5x5¾	Fu MHU	U 4	A	Wis 19000W	2F	R	10.1	125.	14x3½x5/32	TL
51	(7) 35T-6	6	1595	152	172	15000	4050	B7.50/20	DB7.50/20	Lyc ASD	6-3¾x4½	Fu MKU	U 4	No	Tim 53200H	SF	H	5.37	34.9	8x2½x¼	TL
52	(7) 45T-6	8	3185	149	171	19500	4425	B8.25/20	DB8.25/20	Lyc TS	6-3⅞x5	Fu JVUOG	U 5	No	Tim 54000H	SF	H	6.35	45.2	8x2½x¼	TL
53	65T-6	10	4170	162	179	23500	7850	B9.00/20	DB9.00/20	Wau SRL	6-4⅜x5⅛	Fu VUOG	U 5	No	Tim 58200H	SF	R	7.57	55.1	10x3x¼	TL
54	65T-8	10	4230	162	179	23000	7850	B9.00/20	DB9.00/20	Lyc AEC	8-3¾x4¾	Fu VUOG	U 5	No	Tim 58200H	2F	R	7.57	55.1	10x3x¼	TL
55	75T-6	12	5445	162	179	28000	8850	B9.75/20	DB9.75/20	Wau SRK	6-4⅝x5⅛	Fu VUDG	U 5	No	Wis 1137W	2F	R	8.1	56.6	11x3x¼	TL
56	75T-8	12	5400	162	179	28000	8850	B9.75/20	DB9.75/20	Lyc AED	8-3¾x4¾	Fu VUOG	U 5	No	Wis 1137W	2F	R	9.0	63.7	11x3x¼	TL
57	Hahn-Selden..... 17	1½	1500	142	162	7900	3750	P32x6	P32x6	Con 18E	6-3⅜x4	BL 20	U 4	No	Tim 52000H	BF	R	5.8	24.1	5⅝x2¾x3/16	C
58	317	1½	1610	142	162	7900	3900	P32x6	P32x6	Con 16C	6-3⅜x4⅝	BL 35	U 4	No	Tim 52000H	BF	R	5.8	24.1	5⅝x2¾x3/16	P
59	37	2	1935	151	181	10000	4800	P32x6	DP32x6	Con 16C	6-3⅜x4⅝	BL 35	U 4	No	Tim 54200H	BF	R	5.8	31.	5¾x2¾x¼	C
60	39	2½	2920	164	190	13000	5800	P32x6	DP32x6	Con 16R	6-4x4⅛	BL 35	U 4	No	Tim 56200H	BF	R	6.1	33.	7x3½x¼	C
61	47B	3	3785	151	198	15500	7200	P34x7	DP34x7	Con 18R	6-4x4½	BL 51	U 4	No	Tim 58000H	BF	R	6.8	37.	7x3½x¼	C
62	47D	4	4435	151	198	19500	7800	P36x8	DP36x8	Con 18R	6-4x4½	BL 51	U 5	No	Wis 1237H	2F	R	7.3	43.8	7x3½x¼	P
63	67	5	4975	151	198	23500	8700	P36x8	DP36x8	Con 21R	6-4⅜x4¾	BL 55	A 7	A	Wis 1537H	2F	R	7.1	67.	7x3½x¼	P
64	Hendrickson.... 17S	2½	3350	Op	Op	15300	6500	B8.25/20	DB8.25/20	Wau MK	6-4⅛x4¾	Fu JVU	U 5	No	Cla B800	2B	R	Opt	Opt	6x2½x3/16	P
65	19S	3	3800	Op	Op	19500	7000	B9.00/20	DB9.00/20	Wau MK	6-4⅛x4¾	Fu JVU	U 5	No	Cla B800	2F	R	Opt	Opt	6x2½x3/16	P
66	U6-24	4	5500	Op	Op	24000	8200	B9.75/20	DB9.75/20	Wau 6SRL	6-4⅜x5⅛	BL 60-7	A 7	No	Tim 76730	2F	R	Opt	Opt	8x3x3/16	P
67	Hug........... 23	2	1785	146	191	12420	5620	B7.00/20	DB7.00/20	Bud H298	6-3¾x4½	Fu MLU	U 4	No	Cla B611	SF	H	5.66	36.	8x3x¼	T
68	61	2	3020	111	111	14210	5400	B8.25/20	DB8.25/20	BudH298	6-3¾x4½	BL 51-4	U 4	No	Wis 6600	2F	H	6.92	37.	6x3x¼	I
69	82	2½	3870	128	128	19300	7000	B9.00/20	DB9.00/20	Bud K369	6-4 3/16x4¾	Fu VUOG	U 5	No	Wis 1237Q	2F	H	8.64	62.	7x3⅜x¼	I
70	42	3	2175	146	201	15700	6500	B8.25/20	DB8 25/20	Bud H298	6-3¾x4½	Fu MLU	U 4	No	Cla B800	SF	H	6.37	40.5	8x3x¼	T
71	41S	3	5070	158	158	19620	8500	B9.75/20	B12.75/20	Bud K428	6-4⅜x4¾	FuMRUAy	U 4	A 3	Wis 1237QH	2F	H	8.95	119	8x3x¼	T
72	87K	3½	4265	128	128	22400	7600	B9.75/20	DB9.75/20	Bud K428	6-4⅜x4¾	BL 55-7	A 7	No	Wis 1237Q	2F	H	8.95	85.	7x3⅜x¼	I
73	43	3½	3380	146	201	22500	7300	B9.75/20	DB9.75/20	Bud K428	6-4⅜x4¾	Fu VUOG	U 5	No	Wis 1237QH	2F	H	8.95	62.	8x3x¼	T
74	87Q	5	5040	144	144	27875	8500	B10.50/20	DB10.50/20	Bud K428	6-4⅜x4¾	Fu MH	A 8	No	Wis 1737K	2F	H	9.16	99	8x4x11/32	I
75	Indiana......... 85	1½	885	141	169	10000	3950	B6.50/20	DB6.50/20	Her JXB	6-3⅝x4¼	BL 124	U 4	No	Tim 53200H	BF	H	5.66	35.1	7 1/16x2½x7/32	T
76	85DR	1½	1190	141	186	11500	4200	B6.50/20	DB6.50/20	Her JXB	6-3⅝x4¼	BL 325	U 5	No	Wis 4516L	2F	R	6.06	40.3	7 1/16x2½x7/32	T
77	95	2	1095	141	186	12000	4400	P32x6	DP32x6	Her JXC	6-3¾x4¼	BL 224	U 4	No	Tim 54300H	SF	H	5.85	36.2	7 1/16x2½x7/32	C
78	95DR	2-2½	1275	141	186	15000	4650	B7.50/20	DB7.50/20	Her JXC	6-3¾x4¼	BL 224	U 4	No	Wis 4916L	2F	H	6.66	41.2	7 1/16x2½x7/32	C
79	105	2½	1775	156	200	16000	5600	B8.25/20	DB8.25/20	Her JXC	6-3¾x4¼	BL 334	U 4	Op	Tim 56200H	BF	H	7.25	48.3	8⅛x3x3/16	T
80	106DR	2½	1850	156	200	16000	6000	B7.50/20	DB7.50/20	Her WXC	6-4x4¼	BL 324	U 4	Op	Wis 4916L	2F	R	6.06	40.3	8x3x¼	T
81	17	2½	2450	170	224	18000	6600	B8.25/20	DB8.25/20	Her YXC	6-4⅜x4¾	BL 334	U 4	Op	Tim 58205H	BF	R	6.14	37.8	8⅛x3x3/16	T
82	17W	2½	2675	170	224	18000	6700	B8.25/20	DB8.25/20	Her YXC	6-4⅜x4¾	BL 334	U 4	Op	Tim 65200H	WF	R	6.20	38.1	8⅛x3x3/16	T
83	106SW-151	3	2675	188	212	24000	7500	P32x6	DP32x6	Her WXC	6-4x4½	BL 324	U 4	No	Tim SW151	WF	R	6.4	42.6	8⅛x3x3/16	T
84	17DR	3	2675	170	224	19000	6700	B8.25/20	DB8.25/20	Her YXC	6-4⅜x4¾	BL 334	U 4	Op	Wis 70000	2F	R	6.28	38.6	8⅛x3x3/16	T
85	19DR	3½	3400	170	224	22000	8100	B9.00/20	DB9.00/20	Her YXC	6-4⅜x4¾	BL 524	U 4	Op	Wis 1237H	2F	R	7.2	52.3	8⅛x3x3/16	T
86	43DR	4-5	4300	170	224	25000	8500	B9.75/20	DB9.75/20	Her RXB	6-4½x5¼	BL 524	U 4	Op	Wis 1627KH	2F	R	6.96	50.7	8⅛x3x3/16	T
87	45DR	5	4800	170	224	25000	8700	B9.75/20	DB9.75 20	Her RXC	6-4⅝x5¼	BL 534	U 4	Op	Wis 1737H	2F	R	7.14	45.4	8¼x3x⅜	T
88	47DR	5	6500	188	224	28000	10500	B10.50/20	DB10.50/20	Cum 6H Die	6-4⅞x6	BL 735	A 5	No	Wis 1910W	2F	R	7.16	45.0	8¼x3x⅜	T
89	International.... M2	1	850	118	118	7000	3180	B6.50/20	B6.50/20	Wau XAH	4-3⅝x4½	WG T9	U 4	No	Own 713	SF	H	6.16	39.5	11½x2¾x¼	D
90	(8). A2	1½	615	136	160	8000	2935	B6.00/20	B6.00/20	Wau XAH	4-3⅝x4½	WG T-9	U 4	No	Own 702	SF	H	6.16	39.5	5⅞x2¾x3/16	T
91	B2	1½	665	136	136	8000	2945	B6.00/20	B6.00/20	Wau XAH	4-3⅝x4½	MM "O"	U 3	No	Own 701	SF	H	6.16	47.3	5⅞x2¾x3/16	T
92	A3	1½	795	136	160	10000	3572	P30x5	P32x6	Lyc SAH	6-3¼x4½	WG T9	U 4	No	Own 710	SF	H	5.28	33.8	7x2¾x7/32	T
93	A3½	1½	970	136	160	10100	3600	B6.50/20	DB6.50/20	Lyc SAH	6-3¼x4½	WG T7	U 4	No	Own 710	SF	H	5.28	33.8	7x2¾x7/32	T
94	AL3	1½	895	138	164	10000	4032	B6.00/20	DB6.00/20	Lyc 4SLH	6-3¼x4½	WG T7	U 4	No	Own 800	S½	H	6.50	42.9	6½x2¼x¼	T
95	A4	2	1750	145	185	14200	5221	P32x6	DP32x6	Own FBB	6-3⅝x4½	OwnH-5	U 5	No	Own 1000	SF	H	6.50	47.8	7x3¾x¼	T
96	A5	3	2350	156	210	17000	5895	P34x7	DP34x7	Own FBB	6-3⅝x4½	OwnH-5	U 5	No	Own 1002	SF	H	8.5	76.8	8x3¾x¼	T
97	A6	3	2675	156	210	19000	6120	P34x7	DP34x7	Own FBB	6-3⅝x4½	OwnH-5	U 5	No	Own 1150	2F	H	7.16	64.7	8⅛x3¾x3/16	T
98	W2	3½	3900	148	200	22000	8400	S36x5	S36x10	HaS 151	4-4¼x5½	Own H-6	U 5	No	Own 1200	2F	H	6.85	83.9	7x3x¼	T
99	W3	5	4850	160	235	28000	10125	S36x6°	S40x12°	HaS 152	4-4¾x5½	OwnH -7	U 5	No	Own 1300	2F	H	7.85	70.5	8x3x¼	T
100	A7	5	6200	160	225	36000	11590	B9.75/20	DB9.75/20	Own FDB	6-4½x5½	Own H-7	U 5	No	Own 1301	2F	H	6.37	57.2	12⅛x3½x⅜	T
101	A8	7½	6300	160	225	36000	11590	B9.75/20	DB9.75/20	Own FEB	6-5x5½	Own H-7	U 5	No	Own 1301	2F	H	6.37	57.2	12⅛x3½x⅜	T
102	Kenworth....... 85	1½-2	1275	141	165	....	3400	B7.00/20	B7.00/20	Con 18E	6-3⅜x4	BL 214	U 4	...	Cla B370	SF	H	5.4	34.6	5⅛x3x¼	P
103	101B	2-2½	2050	144	186	....	4700	B7.50/20	DB7.50/20	Bud H298	6-3¾x4½	BL 234	U 4	...	Tim 54300H	SF	H	5.83	38.4	5⅛x3x¼	P
104	127	2½-3	2600	154	202	....	5490	B8.25/20	DB8.25/20	Her WXC	6-4x4½	BL 324	U 4	...	Tim 56200H	SF	H	6.16	40.7	8x2¼x¼	T
105	146B	3-4	3300	158	206	....	5960	B9.00/20	DB9.00/20	Bud K393	6-4 3/16x4¾	BL 334	U 4	Op	Tim 58205H	SF	H	6.83	43.4	8x2¼x¼	T
106	166B	3½-4	3850	156	204	....	6890	B9.00/20	DB9.00/20	Bud K393	6-4 3/16x4¾	BL 334	U 4	Op	Tim 58205H	SF	H	6.83	43.4	7-9x3x¼	T
107	166A	3½-4	4330	156	204	....	6890	B9.00/20	DB9.00/20	HaS 147	6-4x5	BL 334	U 4	Op	Tim 58205H	SF	H	6.83	43.4	7-9x3x¼	T
108	186	4-5	4675	155	221	....	7710	B9.75/20	DB9.75/20	Her YXC2	6-4½x4¾	BL 1554	U 4	A 3	Tim 75720H	2F	H	7.33	105.	7-9x3x¼	T
109	241	5-7	5450	169	221	....	9000	B9.75/20	DB9.75/20	Her RXB	6-4½x5¼	BL 714	U 4	A 3	Tim 76720W	2F	H	7.33	85.5	7-9x3x¼	T
110	241A	5-7	6500	169	228	....	9500	B9.75/20	DB9.75/20	HaS 160	6-4¼x5½	BL 714	U 4	A 3	Tim 76720W	2F	H	7.33	85.5	8x3x3/16	C
111	241B	5-7	6150	174	228	....	9500	B9.75/20	DB9.75/20	Bud GL-6	6-4½x6	BL 714	U 4	A 3	Tim 76720W	2F	H	7.33	85.5	8x3x3/16	C
112	241C	5-7	7200	174	228	....	10000	B9.75/20	DB9.75/20	HaS 175	6-5x6	BL 714	U 4	A 3	Tim 76720W	2F	H	6.38	86.5	8x3x3/16	C
113	Kleiber.......... 80	1½-2½	1300	140	160	9300	3625	B6.50/20	DB6.50/20	Con 18E	6-3⅜x4	BL 224	U 4	No	Tim 53200H	BF	H	5.8	34.0	5⅝x3¼x¼	C
114	100	2-3½	1750	170	180	11400	4400	B7.00/20	DB7.00/20	Con 16C	6-3⅜x4⅝	BL 314	U 4	No	Tim 54200H	BF	H	6.16	38.7	7½x3x¼	T
115	120	2½-4½	2350	170	180	13200	5150	B7.50/20	DB7.50/20	Con 16R	6-4x4⅛	BL 314	U 4	No	Tim 56200H	SF	H	6.17	33.4	7½x3x¼	T
116	140	3-5½	3300	180	190	19500	6500	B9.00/20	DB9.00/20	Con 18R	6-4x4½	BL 314	U 4	No	Eat 2413H	2F	H	7.1	38.7	7½x3x¼	T
117	210	4-6	4000	190	192	23400	7100	B9.75/20	DB9.75/20	Con 20R	6-4⅛x4¾	BL 55	A 7	No	EatDR2412H	2F	R	7.25	77.0	7½x3x¼	C
118	260	7	5000	206	210	26000	9000	B9.75/20	DB9.75/20	Con 21R	6-4⅜x4¾	BL 714	A 4	A 3	Eat 65041W	2F	R	8.5	91.0	8x3½x3/16	C
119	La Fr. Republic. A-1	1-1½	795	132	...	6000	3000	B5.50/20	P32x6	Lyc WTG	6-3x4¾	Fu Wo-BB	U 4	No	Tim 51000H	SF	H	5.86	36.1	5⅞x2x3/16	C
120	C-1	1½-2	1295	144	175	7500	3300	B6.00/20	P32x6	Lyc 4SL	6-3¼x4½	Fu Wo-BB	U 4	No	Tim 52200H	SF	R	5.83	35.8	6x2x¼	C
121	C-2	2-2½	995	150	162	10000	3800	B6.00/20	DB6.00/20	Lyc 8A	6-3¼x4½	Fu WOBB	U 4	No	Tim 53200H	SF	H	5.67	35.9	5⅞x2x3/16	C
122	D-1	2-2½	1595	144	175	9000	3750	P30x5	DP30x5	Lyc 4SL	6-3¼x4½	Fu MKU	U 4	No	Tim 54200H	SF	R	5.83	37.9	6x2x¼	C
123	(continued)... D-2	2-2½	1295	162	175	11500	4600	B6.50/20	DB6.50/20	Lyc 8B	6-3⅜x4½	FuMKUBb	U 4	No	Tim 54200H	SF	R	5.83	37.9	7x3x¼	C

Line Number	Piston Displacement	Compression Ratio	Torque lb. ft.	N.A.C.C. Rated H.P.	Max. Brake H.P. at R.P.M. Given	Valve Arrangement	Camshaft Drive	Piston Material	Main Bearings: Number and Diameter	Main Bearings: Length	Oiling System Type	Governor Make	Fuel Syst.: Carburetors Make	Fuel Syst.: Fuel Feed	Electrical: Ignition System Make	Electrical: Generator, Starter Make	Clutch Type and Make	Radiator Make	Universals Make	Front Axle: Make and Model	Steering Gear Make	Brakes Service: Make, Location Type, Operation	Brakes Service: Lining Area	Brakes Service: Drum Material	Brakes: Hand Type, Location	Body Mounting Data: Cab to Rear of Frame	Body Mounting Data: Cab to Rear Axle	Body Mounting Data: Width of Frame	Springs: Front	Springs: Rear	Springs: Auxiliary Type
1	410	4.5	270	40.8	83-2100	L	G	C	4-2½	9⅞	PC	Bu	Zen	V	AL	AL	D.Fu	Lo	Blo	Tim 35000H	Ha	L4IH	584	a	FX	156	97½	34	42x2½	54x3	½
2	411	4.5	270	40.8	83-2100	L	G	C	4-2½	9⅞	PC	Bu	Zen	V	AL	AL	D.Ow	Lo	Blo	Tim 26450H	Ros	L4IH	618	a	FX	144	94½	34	42x3	56x3	½
3	411	4.5	270	40.8	83-2100	L	G	C	4-2½	9⅞	PC	Bu	Zen	V	AL	AL	D.Ow	Lo	Blo	Tim 27450H	Ros	L4IH	568	a	FX	144	94½	34	42x3	56x4	½
4	200	4.9	127	26.3	60-3000	L	C	B	3-2 1/16 r	5⅝	CC	No	Ma	M	DR	DR	P.Ow	Lo	MM	Own	Jac	B4IM	211	p	4I	87	48	34	38x2	50¼x2½	N
5	200	5.1	132	26.3	66-3200	L	C	B	3-2 1/16 r	5⅞	FP	No	Ma	M	DR	DR	P.Ow	Lo	Own	Own	Jac	O4IM	175	p	2I	85⅛	50¼	37	36x1¾	45x2½	N
6	200	5.1	132	26.3	66-3200	L	C	B	3-2 1/16 r	5⅞	FP	No	Ma	M	DR	DR	P.Ow	Lo	Spi	Own	Jac	B4IM	290	a	TX	87	48	34	38x2	50¼x2½	N
7	257	4.5	185	28.3	76-2500	H	G	C	4-2⅜	8⅛	PC	Ha	Ma	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IM	239	pa	TX	87	48	34	38x2	50¼x2½	N
8	200	5.1	132	26.3	66-3200	L	C	B	3-2 1/16 r	5⅞	FP	No	Ma	M	DR	DR	P.Ow	Lo	Cle	Own	Jac	O4IM	175	p	2I	85⅛	50¼	37	36x1¾	45x2½	½
9	257	4.5	185	28.3	76-2500	H	G	C	4-2⅜	8⅛	PC	Ha	Ma	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IM	290	a	TX	87	48	34⅛	38x2	50¼x2½	½
10	257	4.5	185	28.3	76-2500	H	G	C	4-2⅜	8⅛	PC	Ha	Ma	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IM	288	a	TX	107	59	34 1/16	38x2½	50x3	½
11	257	4.5	185	28.3	76-2500	H	G	C	4-2⅜	8⅛	PC	Ha	Ma	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IM	345	a	TX	107	59	34 1/16	38x2½	50x3	½
12	257	4.5	185	28.3	76-2500	H	G	C	4-2⅜	8⅛	PC	Ha	Ma	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IM	320	a	TX	107	59	34 1/16	38x2½	50x3	½
13	257	4.5	185	28.3	76-2500	H	G	C	4-2⅜	8⅛	PC	Ha	Ma	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IM	320	a	TX	107	59	34 1/16	38x2½	50x3	½
14	257	4.5	185	28.3	76-2500	H	G	C	4-2⅜	8⅛	PC	Ha	Ma	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IM	345	a	TX	107	59	34 1/16	38x2½	50x3	½
15	331	4.4	230	33.7	94-2500	H	G	A	4-2½	8 27/32	PC	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	379	a	TX	125	70	34 1/16	40x3	50x3	½
16	331	4.4	230	33.7	94-2500	H	G	C	4-2½	8 27/32	PC	Ha	Ma	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IM	418	a	TX	125	69¼	34 1/16	40x3	54x3	½
17	400	4.6	296	40.9	110-2300	H	G	A	4-2.7	8 15/32	FP	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	449	a	TX	125	69¼	34 1/16	40x3	54x3	½
18	331	4.4	230	33.7	94-2500	H	G	A	4-2½	8 27/32	PC	Ha	Str	M	DR	DR	dp.Ow	Lo	Cle	Own	Jac	B4IM	483	a	TD	125	70	34 1/16	40x3	54x3	½
19	400	4.6	296	40.9	110-2300	H	G	A	4-2.7	8 15/32	FP	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	557	a	TX	125	70	34 1/16	40x3	54x3	½
20	525	4.5	380	48.6	128-2100	H	C	A	7-2¾	14 13/32	FP	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	594	a	TX	137	82	34 1/16	50x3½	54x3	½
21	200	4.7	121	21.0	50-2800	L	C	A	3-2⅛	5⅞	FP	No	Til	M	AL	AL	D.Jo	Pe	Blo	Tim 30000H	Ros	L4IH	249	p	FD	81½	51¾	34	36x2¼	45x2½	½
22	214	5.3	142	27.4	71-3200	L	C	A	4-2⅜	6⅜	FP	No	Til	M	AL	AL	D.Jo	Pe	Blo	Tim 30000H	Ros	L4IH	249	p	FD	81½	51¾	34	36x2¼	45x2½	½
23	200	4.7	121	24.0	50-2800	L	C	A	3-2⅛	5⅞	PC	No	Til	M	AL	AL	D.Jo	Pe	Blo	Tim 30000H	Ros	L4IH	249	p	FD	81¾	51½	34	36x2¼	45x2½	½
24	214	5.3	142	27.3	71-3200	L	C	A	4-2⅜	6⅜	PC	No	Til	M	AL	AL	D.Jo	Pe	Blo	Tim 30000H	Ros	L4IH	249	p	FD	81¾	51½	34	36x2¼	45x2½	½
25	299	4.9	198	33.7	85-2800	L	G	C	4-2⅝	9⅛	PC	No	Til	M	AL	AL	P.BL	Pe	Blo	Tim 30000	Ros	L4IH	260	p	FD	81¾	51½	34	36x2¼	45x2½	½
26	224	4.7	146	25.3	61-2900	L	G	C	4-2⅜	8 3/16	PC	Mo	Zen	V	AL	AL	D.Jo	Pe	Blo	Tim 31000H	Ros	L4IH	260	p	FD	94	60⅜	34	40x2¼	50x2½	½
27	299	4.9	198	33.7	85-2800	L	G	C	4-2⅝	9⅛	PC	No	Til	M	AL	AL	P.BL	Pe	Blo	Tim 31000	Ros	L4IH	269	p	FD	94	60⅜	34	40x2¼	50x2½	½
28	227	4.7	136	27.2	55-2400	L	G	C	3-2⅛	5⅞	PC	Mo	Til	M	AL	AL	D.Jo	Pe	Blo	Tim 31000H	Ros	L4IH	260	p	FD	81	51¾	34	36x2¼	45x2½	½
29	248	5.0	150	27.3	70-3000	L	C	C	7-2⅜	10	FP	Mo	Til	M	AL	AL	D.Jo	Pe	Blo	Tim 31000H	Ros	L4IH	260	p	FD	81	51¾	34	36x2¼	45x2½	½
30	278	4.7	182	31.5	85-3300	L	G	A	4-2⅝	9⅛	PC	Mo	Til	M	AL	AL	P.BL	Pe	Blo	Tim 31000H	Ros	L4IH	260	p	FD	120	77¼	34	42x2¼	56x3	½
31	299	4.9	198	33.7	85-2800	L	G	C	4-2⅝	9⅛	P	No	Til	M	AL	AL	P.BL	Pe	Blo	Tim 31000	Ros	L4IH	260	p	FD	120	77¼	34	42x2¼	56x3	½
32	380	4.3	238	40.8	88- 400	H	C	C	7-2¾	13 5/16	PC	No	Zen	M	AL	AL	P.BL	Pe	Blo	Tim 31000	Ros	L4IH	260	p	FD	120	77¼	34	42x2¼	56x3	½
33	299	4.9	198	33.7	85-2800	L	G	C	4-2⅝	9⅛	PC	No	Til	M	AL	AL	P.BL	Pe	Blo	Tim 33000H	Ros	L4IHV	330	a	FD	120	77¼	34	42x2¼	56x3	½
34	428	4.1	268	45.9	100-2200	H	C	C	7-2¾	13 5/16	PC	Mo	Zen	M	AL	AL	P.BL	Pe	Blo	Tim 33000	Ros	L4IHV	330	a	FD	120	77¼	34	42x2¼	56x3	½
35	353	4.8	245	36.2	98-2700	L	G	C	4-2¾	10	PC	No	Til	M	AL	AL	D.Jo	Pe	Blo	Tim 33000H	Ros	L4IHV	375	a	FD	127	74¼	34	42x2¼	56x3	½
36	380	4.3	238	40.8	88-2400	H	C	C	7-2¾	13 5/16	PC	Mo	Zen	M	AL	AL	D.Jo	Pe	Blo	Eat 423	Ros	L4IHV	375	a	FD	156	90	41⅛	44x2½	60x3	½
37	428	4.1	268	45.9	100-2200	H	C	C	7-2¾	13 5/16	PC	Mo	Zen	M	AL	AL	D.Jo	Pe	Blo	Eat 423	Ros	L4IHV	375	a	FD	176 7/16	119 7/16	41⅛	44x2½	60x3	½
38	428	4.1	268	45.9	100-2200	H	C	C	7-2¾	13 5/16	PC	Mo	Zen	M	AL	AL	D.BL	Pe	Blo	Tim 35000	Ros	L4IHV	466	a	FD	98	67	34	42x2½	52x3	½
39	779	4.5	505	66.2	143-1600	L	G	H	7-3½	17	PC	No	Til	M	AL	AL	D.BL	Pe	Blo	Tim 35000	Ros	L4IHV	466	a	FD	98	67	34	42x2½	52x3	½
40	428	4.1	268	45.9	100-2200	H	C	C	7-2¾	13 5/16	PC	Mo	Zen	M	AL	AL	D.BL	Pe	Blo	Tim 27450	Ros	Ws4IA	576	a	FD	128⅛	73⅞	36	46x3	58x3½	½
41	672	17.	440	57.0	125-1800	H	G	N	7-3¼	16½	P	Cu	No	M	LN	LN	D.BL	Pe	Blo	Tim 27450	Ros	Ws4IA	576	a	FD	128⅛	73⅞	36	46x3	58x3½	½
42	611	4.1	382	54.1	127-2300	L	G	A	7-3	13 11/16	PC	Pe	Zen	M	AL	AL	D.Fu	Pe	Blo	Tim 27450	Ros	Ws4IA	576	a	FD	198⅛	141⅛	41⅛	44x3	60x4	½
43	201	5.5	140	21.6	63-2900	L	G	C	4-2⅜	7	PC	No	Zen	M	AL	AL	P.BB	Pe	Blo	Tim 30000H	Ros	L4IH	268	a	TX	Opt	71	31	40x2½	54x3	½
44	241	5.1	160	27.3	65-2800	L	G	C	4-2⅜	8 5/16	PC	No	Str	M	AL	AL	D.Fu	Ch	MM	Tim 3000H	Ros	L4IH	268	a	TX	Opt	72	31	40x2½	54x3	½
45	298	5.1	198	33.4	85-2900	L	G	C	4-2⅝	9⅜	PC	Mo	Str	M	AL	AL	D.Fu	Ow	MM	Tim 3100H	Ros	L4IH	342	a	CD	Opt	69	31	40x2½	58x3	½
46	353	4.6	252	36.5	97-2750	L	G	C	4-2¾	10	PC	Mo	Str	M	AL	AL	D.Fu	Ow	MM	Tim 33000H	Ros	L4IH	394	a	CD	Opt	73½	34	40x3	58x3½	½
47	462	4.6	300	45.9	100-2400	L	G	C	7-3	13⅞	PC	Wa	Str	M	AL	AL	D.Fu	Ow	MM	Tim 35100H	Ros	L4IH	493	a G	CD	Opt	70	34	40x3	58x3½	½
48	420	5.2	300	45.0	130-2800	L	G	C	5-2¾	11⅛	PC	Mo	Str	M	AL	AL	D.Fu	Ow	MM	Tim 35100H	Ros	B4IM	493	a G	CD	Opt	86	34	40x3	58x3½	½
49	549	4.5	335	48.6	100-2000	L	G	C	4-3½	11⅜	PC	Wa	Str	M	AL	AL	D.Fu	Ow	MM	Tim27050TW	Ros	B4IM	566	a G	CD	Opt	81	34	40x3	58x4	½
50	677	4.4	460	60.0	125-2000	L	G	A	4-3½	11¾	PC	Wa	Str	M	AL	AL	P.BB	Ow	MM	Tim27050TW	Ros	L4IH	547	a G	CD	Opt	66	34	40x3	58x4	½
51	298	5.1	198	33.5	85-2900	L	G	C	4-2⅝	9⅜	PC	No	Zen	M	AL	AL	D.Fu	Ow	MM	Tim 30000H	Ros	L4IH	268	a	TX	Opt	60	31	40x2½	54x3	½
52	353	4.6	252	36.5	97-2750	L	G	C	4-2¾	10	PC	No	Str	M	AL	AL	D.Fu	Ch	MM	Tim 31000H	Ros	L4IH	268	a	FD	Opt	60	31	40x2½	54x3	N
53	462	5.1	300	45.4	100-2400	L	G	C	7-3	13⅞	PC	No	Str	M	AL	AL	D.Fu	Ch	MM	Tim 33000H	Ros	W2IM	394	a	FD	Opt	66	34	40x3	58x3½	N
54	420	5.2	300	45.	130-2800	L	G	C	5-2¾	11⅞	PC	No	Zen	M	AL	AL	D.Fu	Ch	MM	Tim 33000H	Ros	W2IM	394	a	FD	Opt	66	34	40x3	58x3½	N
55	517	4.5	340	51.3	110-2500	L	G	C	7-3	13⅞	PC	No	Str	M	AL	AL	D.Fu	Ch	MM	Tim35000TW	Ros	L4IH	574	a	FD	Opt	66	34	40x3	58x3½	N
56	420	5.2	300	45.	130-2800	L	G	C	5-2¾	11⅞	PC	No	Zen	M	AL	AL	D.Fu	Ch	MM	Tim35000TW	Ros	L4IH	574	a	FD	Opt	66	34	40x3	58x3½	½
57	214	5.0	137	27.3	66-3000	L	G	A	7-2⅛	8 11/32	FP	No	Zen	V	AL	AL	D.Fu	Ch	MM	Tim 11703H	Ros	L4IH	380	a	TX	110	64½	34	41x2¼	50x2½	½
58	248	5.0	150	27.3	65-2760	L	G	C	7-2⅜	10⅛	FP	No	Str	V	DR	DR	D.BL	Ch	Blo	Tim 11703H	Ros	L4IHV	380	a	TX	110	64½	34	41x2¼	50x2½	½
59	248	5.0	150	27.3	65-2760	L	G	C	7-2⅜	10⅛	FP	No	Zen	V	AL	AL	D.BL	Ow	Blo	Tim 12703H	Ros	L4IHV	452	a	TX	120	73½	34	41x2¼	50x2½	N
60	311	4.1	196	38.4	73-2400	H	C	N	7-2¾	13 5/16	FP	No	Zen	V	AL	AL	D.BL	Ch	Blo	Tim 14703H	Ros	L4IHV	578	a	TD	120	77½	34	41x2¼	50x2½	N
61	339	4.2	212	38.4	82-2400	H	C	N	7-2¾	13 5/16	FP	No	Zen	V	AL	AL	D.BL	Ch	Blo	Tim 15733H	Ros	4IHV	658	a	TD	110	71¼	34	40x2½	56x3	N
62	339	4.2	212	38.4	82-2400	H	C	N	7-2¾	13 5/16	FP	No	Zen	V	AL	AL	D.BL	Ch	Blo	Tim 15733H	Ros	L4IHV	768	a	TD	110	71¼	34	40x2½	56x3	½
63	275	4.2	268	45.9	100-2400	H	C	N	7-2¾	13 5/16	FP	No	Zen	M	AL	AL	D.BL	Ch	Blo	Tim 16710H	Ros	L4IHV	768	a	TD	110	71¼	34	40x2½	56x3½	½
64	381	4.6	240	40.8	87-2500	L	G	C	7-2⅝	12½	PC	Wa	Zen	M	AL	AL	D.Fu	Ch	Blo	Cla F318	Ros	Ws4IA	490	G	TD	Opt	Opt	34	40⅛x3½	50½x3	½
65	381	4.6	240	40.8	87-2500	L	G	C	7-2⅝	12½	PC	Wa	Zen	M	AL	AL	D.Fu	Ch	Spi	Cla F318	Ros	L4IH	490	G	TD	Opt	Opt	34	40⅛x3½	50½x3	½
66	462	4.6	300	45.9	97-2000	L	G	C	7-3	13⅞	PC	Wa	Zen	M	AL	AL	D.BL	Ch	Spi	Tim 27450	Ros	W2IM	690	a	TX	Opt	Opt	34	43x3½	53x3½	½
67	298	5.3	200	33.7	80-2800	L	C	C	7-3	9⅞	PC	Pe	Zen	M	AL	DR	P.BB	Ch	Spi	Cla F318	Ros	W2IM	318	p	CD	81	61	31½	41x2½	54⅞x3	½
68	298	5.3	200	33.7	80-2800	L	C	C	7-3	9⅞	PC	Pe	Zen	M	AL	DR	D.BL	Yo	Blo	Shu 550-74-S	Ros	L4IH	477	G	CD	76	52	34½	41⅞x2½	48½x2½	½
69	369	4.8	234	39.6	99-2800	L	G	B	7-3	11½	PC	Pe	Zen	M	AL	DR	D.Fu	Yo	Blo	Shu 610-103	Ros	L4IH	420	G	CD	94¼	70	34½	41⅞x2½	48½x3	½
70	298	5.3	200	33.7	80-2800	L	C	C	7-3	9⅞	PC	Pe	Zen	M	AL	DR	P.BB	Yo	Blo	Cla F318	Ros	W2IM	322	p	CD	81	61	31½	41x2½	54⅞x3	½
71	428	4.8	280	45.9	107-2600	L	G	B	7-3	11½	PC	Pe	Zen	M	AL	DR	D.Fu	Yo	Blo	Shu 632-5	Ros	L4IH	620	p G	CD	115	72½	31½	41⅞x2½	54⅞x3	½
72	428	4.8	280	45.9	107-2600	L	G	B	7-3	11½	PC	Pe	Zen	M	RB	....	D.BL	Yo	Blo	Shu 610-103	Ros	W2IM	420	G	TD	94¼	70¾	34½	41⅞x2½	48½x3	¼
73	428	4.8	280	45.9	107-2600	L	G	B	7-3	11½	PC	Pe	Zen	M	AL	DR	D.Fu	Yo	Blo	Shu 632-3	Ros	L4IH	620	p G	CD	96½	64	31½	41⅞x2½	54⅞x3	½
74	428	4.8	280	45.9	107-2600	L	G	B	7-3	11½	PC	Pe	Zen	M	RB	....	D.Fu	Yo	Blo	Shu 610-103	Ros	W2IM	360	G	TD	111	86½	35	41⅞x2½	48½x3½	¼
75	263	5.0	160	31.5	68-2800	L	G	C	7-2½	10 11/16	PC	Op	Str	M	AL	AL	P.BL	Yo	Spi	Tim 30020H	Ros	L4IH	249	G	TX	92	56	34	37x2¼	54x2½	½
76	263	5.0	160	31.5	68-2800	L	G	C	7-2½	10 11/16	PC	Op	Str	M	AL	AL	P.BL	Yo	Spi	Tim 30020H	Ros	L4IH	316	G	TX	92	56	34	37x2¼	54x2½	N
77	282	5.3	176	33.7	73-2800	L	G	A	7-2½	10 11/16	PC	No	Str	M	AL	AL	P.BB	Yo	Spi	Tim 31020	Ros	L4IH	353	G	TX	92	56	34	37x2¼	54x2½	½
78	282	5.3	176	33.7	73-2800	L	G	A	7-2½	10 11/16	PC	No	Str	M	AL	AL	P.BB	Yo	Spi	Tim 31020	Ros	L4IH	353	G	TX	102	56	34	37x2¼	54x2½	N
79	282	5.3	176	33.7	73-2800	L	G	A	7-2½	10 11/16	PC	Op	Str	M	AL	AL	P.BL	Yo	Spi	Shu 5572	Ros	L4IHV	383	G	TX	108	69	34	40x2½	54x2½	½
80	339	4.7	216	38.4	76-2400	L	G	A	7-2⅝	13¼	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Shu 5572	Ros	L4IHV	353	G	CD	108	69	34	40x2½	54x3	½
81	428	4.4	283	45.9	94-2200	L	G	A	7-3	14	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Shu 15582	Ros	L4IHV	398	G	CD	142	83	34⅛	40x2½	54x3	½
82	428	4.4	283	45.9	94-2200	L	G	A	7-3	14	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Shu 15582	Ros	L4IHV	398	G	CD	142	83	34⅛	40x2½	54x3	½
83	339	4.7	216	38.4	73-2400	L	G	A	7-2⅝	2¾	CC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Shu 5572	Ros	L4IHV	559	G	CD	168	101⅜	34	39½x2½	54x3	½
84	428	4.4	283	45.9	94-2200	L	G	A	7-3	14	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Shu 15582	Ros	L4IHV	398	G	CD	142	83	34⅛	40x2½	52x4	N
85	428	4.4	283	45.9	94-2200	L	G	A	7-3	14	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Shu 15582	Ros	L4IHV	398	G	CD	142	83	34⅛	40x2½	54x3	½
86	501	4.8	330	48.6	110-2200	L	G	A	7-3	12½	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Shu 15592B	Ros	L4IHV	546	G	CD	142	83	34⅛	40x2½	54x3	½
87	529	4.9	350	51.3	115-2200	L	G	A	7-3	12½	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Shu 15592B	Ros	L4IHV	546	G	CD	142	83	34¼	40x2½	54x3	½
88	672	17.	420	57.0	125-1800	H	G	N	7-3¼	2½	CC	Cu	No	M	No	LN	dp.BL	Yo	Spi	Shu 1633W	Ros	Ws4IA	560	G	CD	144	90	34	40x3	54x3	½
89	186	4.6	124	21.	39-2400	L	G	C	3-2	6⅞	FP	No	Zen	V	DR	DR	P.MM	Mo	MM	Own 104	Ros	B4IM	217	Pa	TX	66 7/16	35 11/16	32⅛	40x2	46x2½	N
90	186	4.6	124	21.	39-2400	L	G	C	3-2	6⅞	FP	No	Zen	V	DR	DR	P.MM	Mo	MM	Own 101	Ros	B4IM	212	P	21	93⅝	53⅝	32⅛	40x2	46x2½	¼
91	186	4.6	124	21.	39-2400	L	G	C	3-2	6⅞	FP	No	Zen	V	DR	DR	P.MM	Mo	MM	Own 101	Ros	B4IM	212	P	21	93⅝	53⅝	32⅛	40x2	46x2½	N
92	224	4.7	138	25.3	54-2700	L	G	A	4-2⅜	8 3/16	PC	No	Zen	M	DR	DR	P.Ro	Mo	MM	Own 105	Ros	B4IM	287	P	2I	93⅝	53⅝	32 1/16	40x2	46x2½	N
93	224	4.7	138	25.3	54-2700	L	G	A	4-2⅜	8 3/16	PC	No	Zen	M	DR	DR	P.Ro	Mo	MM	Own 200	Ros	B4IM	302	P	2I	93⅝	53⅝	32 1/16	40x2¼	46x2½	½
94	224	4.7	138	25.3	54-2700	L	G	A	4-2⅜	8 3/16	PC	No	Zen	V	DR	DR	P.Ow	Mo	MM	Own 200	Ros	B4IM	295	Pa	2I	98⅛	55⅝	32	40x2¼	52x2½	½
95	279	4.6	176	31.5	67-2600	H	G	C	7-2½	13 5/32	FP	Ha	Zen	M	DR	DR	P.Ow	Mo	MM	Own 251	Ros	B4IM	378	Pa	2I	104	61½	34	42x3	54x3	¼
96	279	4.6	176	31.5	67-2600	H	G	C	7-2½	13 5/32	FP	Ha	Zen	M	DR	DR	P.Ow	Mo	MM	Own 300	Ros	B4IM	430	Pa	2I	115	72½	34	42x3	56x3	¼
97	279	4.6	176	31.5	67-2600	H	G	C	7-2½	13½	FP	Ha	Zen	M	DR	DR	P.Ow	Mo	MM	Own 300	Ros	B4IM	430	Pa	2I	115	72½	34	42x3	56x3	¼
98	312	4.0	200	28.9	59-1800	H	C	A	3-2¾	8¾	FP	HS	Zen	V	RB	DR	P.Ow	Ow	Ow	Own 400	Own	BO4IM	710	Pa	2I	106½	73¼	34	41⅛x3	56x3½	¼
99	390	3.8	240	36.1	69-1800	H	C	A	3-3	8⅜	FP	HS	Zen	V	RB	DR	P.Ro	Ow	Ow	Own 500	Own	BO4IM	794	Pa	2I	120	81⅞	34	44x3	58x4	¼
100	525	4.5	312	48.6	98-1800	H	G	C	7-3¼	17¾	FP	Ha	Zen	M	DR	DR	P.Ro	Mo	MM	Own 503	Ros	BO4IMV	729	Pa	TD	106	72	34	48x3	56x3	¼
101	548	4.4	415	60.0	115-1800	H	G	C	7-3¼	17¾	FP	Ha	Zen	M	DR	DR	P.BL	Mo	MM	Own 503	Ros	BO4IMV	729	Pa	TD	106	72	34	48x3	56x3	N
102	214	4.9	137	27.3	61-3000	L	C	A	7-2⅛	9 11/16	CC	No	Zen	M	DR	DR	P.BL	Pe	Spi	Cla F208	Ros	L4IH	222	p	TX	88	60	34⅛	40x2¼	52x3	N
103	298	4.7	200	33.7	80-2800	L	G	A	7-3	9⅞	CC	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 31000H	Ros	L4IH	335	a	FD	96	60	34⅛	39x2½	52x3	½
104	339	4.4	212	38.4	76-2400	L	G	C	7-2⅝	13¼	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IH	335	a	FD	110	72	31½	40x2½	52x3	½
105	393	4.9	260	42.1	103-2600	L	G	C	7-3	11½	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IHV	394	a	FD	120	72	31½	40x2½	52x3	½
106	393	4.9	260	42.1	103-2600	L	G	C	7-3	11½	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35100H	Ros	L4IHV	455	a	FD	120	72	33¾	42x2½	56x3½	½
107	377	4.9	258	38.4	92-2300	H	C	A	4-2⅞	11⅛	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35100H	Ros	L4IHV	455	a	FD	120	72	33¾	42x2½	56x3½	½
108	453	4.8	300	48.6	98-2200	L	G	A	7-3	14	CC	Ha	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35100H	Ros	L4IHV	602	a	FD	110	72	33¾	42x2½	56x3½	½
109	501	4.9	330	48.6	110-2200	L	G	A	7-3	12½	CC	Ha	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 36020N	Ros	Ws2ImV	407	a	FD	132	84	33¾	42x3	56x4	½
110	468	4.4	322	43.3	125-2400	H	C	A	4-2¾	10⅜	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 36020N	Ros	Ws2ImV	407	a	FD	132	84	33¾	42x3	56x4	½
111	572	4.3	358	48.6	114-1900	L	G	C	4-3	10 7/16	CC	Bu	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 36020N	Ros	Ws2ImV	407	a	FD	132	84	33¾	42x3	56x4	½
112	707	4.4	500	30.0	170-2000	H	C	A	7-3¼	11 1/16	FP	HS	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 36020N	Ros	Ws2ImV	407	a	FD	132	84	33¾	42x3	56x4	½
113	214	4.9	137	27.3	61-3000	L	C	C	7-2⅛	8 11/32	FP	No	Str	V	DR	DR	D.BL	Mo	Spi	Tim 30000H	Ros	L4IH	308	G	TX	101	64	34	38x2¼	52x2½	½
114	248	4.4	160	27.4	70-3200	L	C	C	7-2⅜	10 5/32	PC	No	Str	M	DR	DR	D.BL	Ow	Spi	Tim 31000H	Ros	L4IH	452	G	TX	126	76	34	38x2½	52x2½	½
115	311	4.2	196	33.8	73-2400	H	C	C	7-2¾	13	PC	No	Str	M	DR	DR	D.BL	Ow	Spi	Tim 31000H	Ros	L4IH	354	G	F	166	76	34	38x2½	52x3	½
116	339	4.2	212	38.4	80-2400	H	C	C	7-2¾	13 5/16	FP	No	Str	V	DR	DR	D.BL	Ow	Spi	Tim 33020H	Ros	L4IH	648	G	TD	172	104	34	38x2½	52x3	½
117	381	4.2	237	40.8	89-2400	H	C	C	7-2¾	13 5/16	CC	No	Str	M	DR	DR	D.BL	Ow	Spi	Tim 35020H	Ros	L4IHV	676	G	FD	170	108	34	38x2½	52x3	½
118	427	4.2	270	45.9	102-2400	H	C	C	7-2¾	13 5/16	FP	No	Str	M	DR	DR	D.BL	Ow	Spi	Tim 26450	Ros	Ws4IA	848	G	FD	180	130	38	44x2½	52x3	½
119	201	5.4	142	21.5	60-2500	L	G	C	4-2⅜	7	PC	No	Zen	V	AL	AL	P.BB	Pe	Spi	Tim 11710H	Ha	L4IH	268	p	TX	96	54	31⅞	38x2	52½x2½	N
120	224	4.7	145	25.3	61-2750	L	G	C	4-2⅜	8 5/16	PC	No	Zen	V	AL	AL	P.BB	Pe	Spi	Tim 11710H	Ha	L4IH	287	p	TX	109	60⅞	32	38x2	57½x2½	½
121	224	4.7	145	25.3	61-2800	L	G	C	4-2⅜	8 5/16	PC	No	Zen	M	AL	AL	P.BB	Pe	Spi	Tim 30000H	Ha	L4IH	287	Da	TX	110¾	67½	31⅞	38x2	52½x2½	½
122	224	4.7	145	25.3	61-2750	L	G	C	4-2⅜	8 5/16	PC	No	Zen	V	AL	AL	P.BB	Pe	Spi	Tim 31000H	Ha	L4IH	271	Da	TX	109	60⅞	32	38x2	52½x2½	½
123	242	5.0	160	27.3	65-2800	L	G	C	4-2⅜	8 5/16	PC	No	Zen	M	AL	AL	P.BB	Pe	Spi	Tim 31000H	Ha	L4IH	271	Da	TX	143¾	79½	32	38x2	52½x2½	½

Line Number	Make and Model	General: Tonnage Rating	General: Chassis Price	General: Standard Wheelbase	General: Max. W. B. Furnished	General: Gross Vehicle Weight	General: Chassis Wt. (Stripped)	Tire Size: Front	Tire Size: Rear	Engine: Make and Model	Engine: No. of Cylinders Bore and Stroke	Transmission: Make and Model	Transmission: Location and Forward Speeds	Transmission: Aux. Location and Speeds	Rear Axle: Make and Model	Rear Axle: Gear and Type	Rear Axle: Drive and Torque	Gear Ratios: In High	Gear Ratios: In Low	Frame: Side Rail Dimensions	Frame: Type
1	La Fr. Republic. E-1	2½-3	1985	162	190	13000	5000	P32x6	DP32x6	Bud H-260	6-3½x4½	Fu Mlu-Bb	U 4	No	Tim 56200H	SF	R	7.4	47.0	7x3x¼	C
2	(concluded)... F-3	3-3½	2485	174	198	15000	5625	P34x7	DP34x7	Lyc ASD	6-3¾x4½	Fu MGU14	U 4	No	Tim 58200H	SF	R	7.8	50.6	8x3x¼	C
3	............H-2	3½-4	2985	174	198	16000	6350	P34x7	DP34x7	Lyc TS	6-3⅞x5	Fu MGU	U 4	No	Wis 69317BL	2F	R	6.41	41.6	8x3x¼	C
4	............H-3	3½-4½	3395	179	206	18000	7300	B9.75/20	DP9.75/20	Bud K393	6-4 1/16x4¾	Fu MRU	U 4	No	Tim 75720H	2F	R	8.15	54.0	8x3x¼	C
5	............M-2	4½-5	4000	174	198	20000	7500	P36x8	DP36x8	Wau 6SRL	6-4⅜x5⅛	Fu VUOG	U 5	No	Wis 1237H	2F	R	7.2	51.0	8x3x¼	C
6	............M-3	4½-5½	4750	191	204	22000	8300	B10.50/20	DB10.50/20	Wau 6SRL	6-4⅜x5⅛	Fu VUOG	U 5	No	Tim 76725H	2R	R	3.85	62.5	9⅛x3½x3/16	C
7	35-2	5½-6½	5600	174	198	24000	9250	P38x9	DP38x9	Wau 6AB	6-4½x5¾	Fu MHU	U 4	No	Wis 1567H	2F	R	7.33	46.3	9⅛x3½x3/16	C
8	35-3	6½-7½	6400	191	204	28000	10375	B10.50/24	DB10.50/24	Wau 6SRK	6-4⅝x5⅛	FuMHUAy	A 4	3	Tim 78720W	2F	R	8.90	111.	9⅛x3½x3/16	C
9	............Q-4	7½-9	10000	Op	260	30000	12750	B10.50/24	DB10.50/24	Own 312B	12-4x5	BL 714	U 4	No	Tim 79740W	W	R	Opt	Opt	12x3½x¼	L
10	Lange............R	1½	2225	140	172	9300	4600	P32x6	P32x6	Her WXB	6-3¾x4½	BL 31	U 3	No	Tim 54000H	BF	R	5.83	28.0	5x2½x3/16	P
11	L	2	3450	144	210	15000	5800	P32x6	DP32x6	Her WXC	6-4x4½	BL 35	U 4	No	Wis 6617	2F	R	7.00	37.5	6x2½x¼	P
12	............O	2½	3950	146	212	17000	5985	P34x7	DP34x7	Her YXB	6-4x4¾	BL 51	U 4	No	Wis 8817	2F	R	7.29	39.1	6x2½x¼	P
13	............H	3	5150	151	187	19000	6850	P36x8	DP36x8	Her YXC	6-4⅜x4¾	BL 55	U 4	No	Wis 1418	2F	R	9.12	48.7	7x2½x¼	P
14	............M	3	5200	140	222	21000	7450	P38x7	DP38x7	Her YXC	6-4⅜x4¾	BL 60	A 7	No	Wis 1402	2F	R	10.1	95.7	7x2½x¼	P
15	............F16	4	5500	148	188	23000	8600	P40x8	DP40x8	Her YXC	6-4⅜x4¾	BL 60	A 7	No	Wis 1552B	2F	R	10.0	95.5	8x3x3/16	P
16	............T	5	5775	148	188	26000	9200	P40x8	DP40x8	Her YXC2	6-4½x4¾	BL 60	A 7	No	Wis 1700	2F	R	10.0	96.0	8x3x3/16	P
17	............VA	5	6200	194	242	26000	9950	P9.75/24	DP9.75/24	Her RXC	6-4⅝x5¼	BL 714	U 4	A 2	Wis 1737KW	2F	R	8.05	Opt	7x2½x¼	P
18	Le Moon........150	1½	1150	140	152	8000	3300	B6.50/20	B6.50/20	Con 16C	6-3⅜x4⅝	BL 214	U 4	No	Tim 53200H	BF	H	5.14	31.8	6x3x3/16	T
19	200	1½-2	1350	160	178	11200	3600	B7.00/20	DB7.00/20	Con 16C	6-3⅜x4⅝	BL 214	U 4	No	Tim 53200H	BF	H	5.14	31.8	6x3x3/16	C
20	300	2-3	1575	163	190	12600	4200	B7.50/20	DB7.50/20	Con 16C	6-3⅜x4⅝	BL 214	U 4	No	Tim 54200H	BF	H	6.80	42.1	6½x3¾x¼	C
21	400	3-4	2175	163	190	15300	5000	B8.25/20	DB8.25/20	Wau 6MS	6-3¾x4¾	BL 314	U 4	No	Tim 56200H	BF	R	6.16	40.6	6½x3¾x¼	C
22	500	4-5	2775	160	190	19500	6000	B9.00/20	DB9.00/20	Wau 6MK	6-4⅛x4¾	BL 514	U 4	No	Tim 58200H	BF	R	6.14	40.6	7x4x¼	C
23	501	4-5	3150	160	190	19500	6500	B9.00/20	DB9.00/20	Wau 6SRL	6-4⅜x5⅛	Fu VUOG	U 5	No	Tim 58200H	BF	R	6.14	40.6	7x4x¼	C
24	.........(9) 600	5-6	3450	169	199	21600	7200	B9.75/20	DB9.75/20	Wau 6SRL	6-4⅜x5⅛	Fu VUOG	U 5	No	Tim 65720H	WF	R	6.00	43.2	7x4x¼	P
25	Maccar........36A	1½-2½	2050	155	183	12000	4850	P7.00/20	DP7.00/20	Bud H298	6-3¾x4½	BL 314	U 4	No	Tim 54200H	BF	R	4.86	32	6 3/16x3x¼	C
26	............40A	2½-4	2400	155	183	15000	5350	P7.50/20	DP7.50/20	Bud H298	6-3¾x4½	BL 314	U 4	No	Tim 56200H	BF	R	6.16	38.7	7x3x¼	C
27	180	3-4½	3500	181	213	18000	7400	P9.00/20	DP9.00/20	Bud K393	6-4 1/16x4¾	BL 554	U 4	No	Wis 8787L	2F	R	6.0	49.3	9x3x¼	T
28	56	3-5	3350	153	194	18000	6200	P8.25/20	DP8.25/20	Bud DW6	6-3¾x5	BL 51	U 4	No	Wis 6787L	2F	R	7.00	37.4	8x3x¼	T
29	60	3-5	3950	153	207	18000	6600	P9.00/20	DP9.00/20	Bud BA6	6-4⅛x5⅛	BL 514	U 4	No	Tim 75200H	2F	R	6.4	34.4	8x3x¼	T
30	............60A	4-6	4750	153	207	22000	7300	B9.75/20	DB9.75/20	Bud BA6	6-4⅛x5⅛	BL 554	U 4	No	Tim 65720H	WF	R	6.8	43.	8x3x¼	T
31	............66A	4-6	5500	184	235	22000	8200	P9.75/20	DP9.75/20	Her YXCP3	6-4⅝x4¾	BL 615	A 5	No	Tim 65720W	WF	R	6.8	44.5	12x3x¼	T
32	............220H	4-6	4750	181	213	22000	8750	P9.75/20	DP9.75/20	Wau 6SRK	6-4⅝x5⅛	BL 615	A 5	No	Tim 65720H	WF	R	6.6	47.9	9x3x¼	T
33	............220W	4-6	5000	181	213	22000	8750	P9.75/20	DP9.75/20	Wau 6SRK	6-4⅝x5⅛	BL 615	A 5	No	Tim 65720W	WF	R	6.6	47.9	9x3x¼	T
34	............86A	5-8	5950	184	235	30000	9500	P10.50/20	DP10.50/20	Her YXCP3	6-4⅝x4¾	BL 70	A 5	No	Tim 66720W	WF	R	7.6	49.8	12x3x¼	T
35	Mack............BL	1-2	2500	138	148	9500	4050	B6.00/20	DB6.00/20	Own BL	6-3¼x5	Own BG	U 4	No	Tim52000B2	SF	H	5.66	27.9	7x3x3/16	T
36	............BG	1½-3	3000	138	192	12000	4800	P32x6	DP32x6	Own BG	6-3⅝x5	Own BG	U 4	No	Own BG	SF	H	5.44	26.8	7x3x7/32	T
37	............BF	2½-4	4200	156	198	16000	6600	B8.25/20	DB8.25/20	Own BG	6-3⅝x5	Own BG	U 4	No	Own AB	2F	H	7.01	33.9	7 3/16x3x3/16	T
38	............AB	3-5	4000	147	219	17500	6450	P34x7	DP34x7	Own AB	4-4¼x5	Own AB	U 4	No	Own AB	CD	R	7.72	37.4	8x2¼x¼	T
39	............AB	3-5	4200	147	219	17500	6700	P34x7	DP34x7	Own AB	4-4¼x5	Own AB	U 4	No	Own AB	2F	H	7.58	36.7	8x2¼x¼	T
40	............AB	3-5	4150	147	219	17500	6450	P34x7	DP34x7	Own BG	6-3⅝x5	Own AB	U 4	No	Own AB	CD	R	7.72	37.4	8x2¼x¼	T
41	............AB	3-5	4500	147	219	17500	6700	P34x7	DP34x7	Own BG	6-3⅝x5	Own AB	U 4	No	Own AB	2F	H	7.58	36.7	8x2¼x¼	T
42	............BM	3-5	4700	157	217	21500	7500	B9.00/20	DB9.00/20	Own BC	6-4x5½	Own BC	U 4	No	Own AB	2F	H	7.01	40.9	7 3/16x3x3/16	T
43	............BC	4-6	5250	154	226	23500	7850	P36x8	DP36x8	Own BC	6-4x5½	Own BC	U 4	No	Own BC	2F	H	7.58	44.2	8⅛x3x3/16	T
44	............BC	4-6	5500	154	226	23500	8000	P36x8	DP36x8	Own BC	6-4x5½	Own BC	U 4	No	Own BC	CD	R	7.88	46.0	8⅛x3x3/16	T
45	............BX	4-6	5750	160	214	24800	7900	B9.75/22	DB9.75/22	Own BX	6-4¼x5½	Own BX	U 4	No	Own BX	CD	R	7.88	55.2	9½x3x¼	T
46	............BX	4-6	5600	160	214	24700	8050	B9.75/22	DB9.75/22	Own BX	6-4¼x5½	Own BX	U 4	No	Own BX	2F	H	7.01	49.4	9½x3x¼	T
47	............BJ	5-8	6450	168	245	31500	9800	B10.50/22	DB10.50/22	Own BK	6-4½x5½	Own AL	A 4	No	Own AK	2F	H	6.92	36.4	11⅛x3½x¼	T
48	............BQ	5-8	6800	191	245	32600	10000	B10.50/22	DB10.50/22	Own BQ	6-4¾x5¾	Own BQ	A 4	No	Own AK	2F	H	6.52	41.9	10½x3x¼	T
49	............AK	5-8	5150	162	228	28500	9500	B10.50/24°	DB10.50/24°	Own AC	4-5x6	Own AC	J 4	No	Own AC	CD	R	7.83	50.5	8½x2¾x¼	C
50	............AK	5-8	5250	162	228	28500	9400	B10.50/24°	DB10.50/24°	Own AC	4-5x6	Own AK	A 4	No	Own AK	2F	H	6.92	55.3	8½x2¾x¼	C
51	............AK	5-8	6450	174	240	32500	10400	B10.50/22	DB10.50/22	Own BQ	6-4¾x5¾	Own AC	A 4	No	Own AK	2F	H	6.92	44.3	8⅝x3x3/16	C
52	.......AC Light	5-8	4950	168	240	28000	9200	B10.50/24°	DB10.50/24°	Own AC	4-5x6	Own AC	J 4	No	Own AC	CD	R	8.46	54.4	8x3x3/16	C
53	.....AC Medium	6-9	5500	168	240	32000	9800	S36x6	DS40x6	Own AC	4-5x6	Own AC	J 4	No	Own AC	CD	R	7.75	49.8	8x3x3/16	C
54	.......AC Heavy	7-10	6000	168	240	37000	10150	S36x7	DS40x7	Own AC	4-5x6	Own AC	J 4	No	Own AC	CD	R	8.95	57.4	8x3x3/16	C
55	............AC	6-9	6450	174	240	28500	11400	B10.50/24	DB10.50/24	Own BQ	6-4¾x5¾	Own AC	A 4	No	Own AC	CD	R	8.4	53.9	8⅝x3x3/16	C
56	............AP	7½-10	8500	191	191	36500	11700	S36x7	DS40x8	Own AP	6-5x6	Own AP	J 4	No	Own AP	CD	R	8.31	53.3	8x3x3/16	C
57	Mar.-Herr.... TL-27	2-2½	3785	120	135	12000	5500	B7.50/20	DB7.50/20	Her JXC	6-3¾x4¼	BL328	U4	No	Own Tim	SF	H	Opt.	Opt	6x2½x¼	T
58	............TL-28	2½-3	4285	158	188	15250	7250	B8.25/20	DB8.25/20	Her WXC	6-4x4½	BL 328	U4	No	Own Wis	2F	H	Opt	Opt	6x2¾x¼	C
59	............TL-29	3-3½	4950	158	188	17200	7700	B8.25/22	DB8.25/22	Her WXC	6-4x4½	Fu MGU	U4	A 2	Own Wis	2F	H	Opt	Opt	6x2¾x¼	C
60	............TL-30	3½-4	5485	158	188	19370	8370	B9.00/20	DB9.00/20	Her WXC3	6-4¼x4½	Fu MGU	U4	A 2	Own Wis	2F	H	Opt	Opt	6x2¾x¼	P
61	............TH-300	3½-4	6285	163	193	20300	9300	B9.75/20	DB9.75/20	Her YXC	6-4⅜x4¾	Fu JVUOG	U5	A 2	Own Wis	2F	H	Opt	Opt	8⅛x3x3/16	C
62	............TH-310	4-5	6785	163	193	22620	9620	B9.75/20	DB9.75/20	Her YXC3	6-4⅝x4¾	Fu VUOG	U5	A 2	Own Wis	2F	H	Opt	Opt	8⅛x3x3/16	P
63	............TH-310A	5-6	7785	163	193	25120	10120	B9.75/22	DB9.75/22	Her RCX	6-4⅝x5¼	Fu VUOG	U5	A 2	Own Wis	2F	H	Opt	Opt	8⅛x3x3/16	P
64	............TH-320	5-7	10500	198	228	31200	14200	B10.50/24	DB10.50/24	Her HXB	6-5x6	BL 724	U4	A 3	Own Wis	2F	H	Opt	Opt	10⅛x3x⅜	C
65	............TH-330	7½	12500	198	228	33920	14920	B11.25/24	DB11.25/24	Her HXB	6-5½x6	BL 734	U4	A 3	Own Wis	2F	H	Opt	Opt	10⅛x3x⅜	P
66	Moreland.... RR-10	1½	1750	159	Op	9500	4195	B5.50/20	DB6.50/20	Her JXC	6-3⅜x4⅝	BL 224	U 4	No	Tim 53200H	SF	R	5.66	35.0	7 1/16x2⅝x¼	T
67	............RR-12	2	1950	159	Op	12000	4585	B6.50/20	DB7.50/20	Her JXC	6-3⅜x4⅝	BL 224	U 4	No	Tim 54200H	SF	R	5.83	36.1	7 1/16x2⅝x¼	T
68	............B13, 15	2½-3½	2850	184	Op	15000	5815	B8.25/20	DB8.25/20	Her WXC	6-4x4½	BL 234	U 4	No	Tim 56200H	SF	R	6.17	40.7	9 1/16x3½x3/16	T
69	............B16, 18	4-4½	3025	184	Op	18000	6195	B9.00/20	DB9.00/20	Her WXC	6-4x4½	BL 325	U 4	No	Tim 58200H	SF	R	6.13	40.5	9 1/16x3½x3/16	T
70	............E16, 18	4-4½	3300	184	Op	18000	6460	B9.00/20	DB9.00/20	Her WXC3	6-4¼x4½	BL 325	U 4	No	Tim 58200H	SF	R	6.13	32.9	9 1/16x3½x3/16	T
71	............E19, 21	5-5½	3800	184	Op	21000	7155	B9.75/20	DB9.75/20	Her WXC3	6-4¼x4½	BL 525	U 4	No	Tim 65720H	FW	R	7.25	38.	9 1/16x3½x3/16	T
72	............H-24	5½-6½	5300	196	Op	24000	8700	B9.75/20	DB9.75/20	Her RXB	6-4½x5¼	BL 5212	A 7	No	Tim66720TW	FW	R	8.20	59.7	9⅛x2¼x3/16	T
73	Netco............A	1½-2	2800	146	168	8400	4000	B6.00/20	DB6.00/20	Wau 6ZK	6-3⅜x4⅛	BL 214	U 4	No	Tim 52000H	SF	H	4.85	Opt	6x2½x¼	C
74	............B	2½	3000	155	183	12600	5000	B7.50/20	DB7.50/20	Wau 6TL	6-3⅜x4¾	BL 314	U 4	No	Tim 54000H	BF	H	5.83	Opt	6x3x¼	C
75	C	3	3500	148	200	15300	6000	B8.25/20	DB8.25/20	Wau 6MK	6-4⅛x4¾	BL 314	U 5	No	Tim 58000H	BF	H	6.83	Opt	7x3x¼	C
76	............E	3½	4500	140	200	23400	7500	B9.75/20	DB9.75/20	Wau 6SRL	6-4⅜x5⅛	BL 55	U 4	No	Tim 65704	WF	R	7.25	Opt	9x3x¼	C
77	............J	5	5300	140	200	28200	9500	B10.50/20	DB10.50/20	Wau 6SRK	6-4⅝x5⅛	BL 615	U 5	No	Tim 68700	WF	R	8.0	9.25	9x3x¼	C
78	............K	5½	6500	180	220	37500	11000	B12.00/20	DB12.00/20	Lyc AEC	8-3¾x4¾	BL 615	U 5	No	Wis 1627KH	2F	R	Opt	Opt	9x3x¼	C
79	Oshkosh........LB	2-2½	3750	146	165	13900	6700	B9.00/20	B9.00/20	Her JXC	6-3¾x4¼	BL 51-4	U 4	No	Own LB	2F	H	7.3	39.0	7x3x¼	T
80	LC	2½-3	4000	146	165	15150	6950	B9.00/20	B9.00/20	Her WXC	6-4x4½	BL 55-4	U 4	No	Own LC	2F	H	7.3	53.1	7x3x¼	T
81	............H2A	3½	4675	146	165	16550	7550	B9.75/22	B9.75/22	Her WXC3	6-4¼x4½	BL 55-7	A 7	No	Own H2A	2F	H	8.94	34.9	7x3x½	T
82	............H2B	3½-4	4890	146	165	18500	8400	B10.50/22	B10.50/22	Her YXC	6-4⅜x4¾	BL 615	U 5	No	Own H2B	2F	H	8.94	73.4	7x3x¼	L
83	............H2C	4	5165	146	165	19700	8700	B11.25/20	B11.25/20	Her RXB	6-4½x5¼	BL 615	U 5	No	Own H2C	2F	H	9.6	78.9	7x3x½	L
84	............Y2D	4-5	5490	146	165	21000	9200	B11.25/20	B11.25/20	Her RXB	6-4½x5¼	BL 70-7	A 7	No	Own Y2D	2F	H	9.6	91.2	7x3x½	L
85	............FHX	5	6145	146	165	21850	9850	B12.75/20	B12.75/20	Her RXC	6-4⅝x5¼	BL 70-7	A 7	No	Own FHX	2F	H	9.6	90.2	8x3x½	L
86	............F2A	5-7	6775	146	165	26650	10650	B12.75/20	B12.75/20	Her RXC	6-4⅝x5¼	BL 70-7	A 7	No	Own F2A	2F	H	9.1	35.5	8x3x½	L
87	Pierce-Arrow 13S385	2-2½	2500	160	200	15000	5750	B8.25/20	DB8.25/20	Own E	8-3½x5	Co RU4SL	U 4	No	Tim 56200	SF	R	5.28	33.5	7⅝x3½x3/16	C
88	............15T298	3-3½	1950	150	200	15000	5725	B8.25/20	DB8.25/20	Her WXB	6-3¾x4½	Cl B102	U 4	Op	Tim 56200	SF	R	6.16	34.0	7⅝x3½x3/16	C
89	............17T361	3-4	2300	180	200	17000	5800	B8.25/20	DB8.25/20	Her WXC2	6-4⅛x4½	Co RU4SL	U 4	Op	Tim 58200	SF	R	5.57	34.4	7⅝x3½x3/16	C
90	............18W361	3½-4½	3000	150	200	18000	6660	B9.00/20	DB9.00/20	Her WXC2 Spe	6-4⅛x4½	Co RU4SL	U 4	Op	Tim 65720	WF	R	6.8	41.9	8⅛x2½x3/16	C
91	............19R428	3½-4½	3600	150	200	19000	7850	B9.00/20	DB9.00/20	Her YXC	6-4⅜x4¾	Co TNU	U 4	Op	Tim 65720	WF	R	5.4	28.0	8⅛x2½x3/16	C
92	............19R479	3½-4½	3600	150	200	20000	7900	B9.00/20	DB9.00/20	Her YXC3	6-4⅝x4¾	Co TNU	U 4	Op	Tim 65720	WF	R	5.04	28.6	8⅛x2½x3/16	C
93	............21W361	4½-5½	3100	150	190	21000	6800	B9.75/20	DB9.75/20	Her WXC2 Spe	6-4⅛x4½	Co RU4SL	U 4	Op	Tim 65720	WF	R	9.25	18.3	8½x2½x3/16	C
94	............21R428	4½-5½	3700	150	190	21000	7970	B9.75/20	DB9.75/20	Her YXC	6-4⅜x4¾	Co TNU	U 4	Op	Tim 65720	WF	R	6.8	33.	8½x2½x3/16	C
95	............21X428	4½-5½	3900	200	240	21000	8120	B9.75/20	DB9.75/20	Her YXC	6-4⅜x4¾	Co TNU	U 4	Op	Tim 65720	WF	R	6.8	33.	9⅛x2½x3/16	C
96	............22R501	4½-5½	3750	150	200	22000	7970	B9.75/20	DB9.75/20	Her RXB	6-4½x5¼	Co TNU	U 4	Op	Tim 65720	WF	R	6.8	33.0	8⅛x2½x3/16	C
97	............22X479	4½-5½	3900	200	240	24000	8120	B9.75/20	DB9.75/20	Her YXC2	6-4⅝x4¾	Co TNU	U 4	Op	Tim 65720	WF	R	6.8	36.	9⅛x2½x3/16	C
98	............22X501	4½-5½	4000	200	240	21000	8120	B9.75/20	DB9.75/20	Her RXB	6-4½x5¼	Co TNU	U 4	Op	Tim 65720	WF	R	6.8	36.	9⅛x2½x3/16	C
99	............24X501	5-6	4200	150	200	24000	9250	B10.50/20	DB10.50/20	Her RXB	6-4½x5¼	Co TNU	U 4	Op	Tim 66720	WF	R	7.6	40.2	9⅛x2½x3/16	C
100	............24M611	5-6	5000	150	200	24000	10200	B10.50/20	DB10.50/20	Her GXA	6-4¾x5¾	Own618290	A 4	Op	Tim 66720	WF	R	7.6	39.9	9⅛x2½x3/16	C
101	....(T) 27T361T	....	2450	150	170	27000	5725	B9.00/20	DB9.00/20	Her WXC2	6-4⅛x4½	Co RU4SL	U 4	Op	Tim 58200	SF	R	7.8	18.2	7⅝x8½x3/16	C
102	....(T) 27R428T	....	3650	150	170	27000	7000	B9.00/20	DB9.00/20	Her YXC	6-4⅜x4¾	Co TNU	U 4	Op	Tim 65720	WF	R	7.25	38.4	8⅛x2½x3/16	C
103	............28X501	6-7	4600	160	200	28000	10675	B10.50/24	DB10.50/24	Her RXB	6-4½x5¼	Co TNU	U 4	Op	Own 616743	WF	A	10	53	9⅛x2½x3/16	C
104	............28M611	6-7	5400	160	200	28000	11600	B10.50/24	DB10.50/24	Her GXA	6-4¾x5¾	Own618290	A 4	Op	Own 616743	WF	A	10	52.5	9⅛x2½x3/16	C
105	............28Y479	6-7	4400	160	200	28000	10675	B10.50/24	DB10.50/24	Her YXC3	6-4⅝x4¾	Co TNU	U 4	Op	Own 616743	WF	A	10	53	9⅛x2½x3/16	C
106	............28L501	6-7	4900	200	240	28000	10975	B10.50/24	DB10.50/24	Her RXB	6-4½x5¼	Co TNU	U 4	Op	Own 616743	WF	A	10.	53.	10x3x3/16	C
107	............28K611	6-7	5500	200	240	28000	11900	B10.50/24	DB10.50/24	Her GXA	6-4¾x5¾	Own618290	A 4	Op	Own 616743	WF	A	10.	53.	10x3x3/16	C
108	............34K611	7½-10	5300	170	200	34000	11675	B10.50/24	DS40x8	Her GXA	6-4¾x5¾	Own618290	A 4	Op	Own 616743	WF	A	8	42	10x3x3/16	C
109	....(T) 34T361T	....	2650	150	170	34000	5775	B9.00/20	DB9.00/20	Her WXC2	6-4⅛x4¼	BL 325	U 5	Op	Tim 58200	SF	R	7.8	48.2	7⅝x3½x3/16	C
110	....(T) 35R501T	....	3800	150	170	35000	7050	B9.75/20	DB9.75/20	Her RXB	6-4½x5¼	Co TNU	U 4	Op	Tim 65720	DF	R	8.15	43.1	8⅛x2½x3/16	C
111	....(T) 45X501T	....	4800	160	170	45000	9300	B10.50/20	DB10.50/20	Her RXB	6-4½x5¼	Co TNU	U 4	Op	Tim 66720	DF	R	9.93	52.8	9⅛x2½x3/16	C
112	....(T) 75M779T	....	6400	190	190	75000	12750	B10.50/24	DB10.50/24	Her HXA	6-5¼x6	Own618290	A 4	A	Own 616743	WF	A	9.9	51.9	9⅛x2½x3/16	C
113	Relay..........15A	1	1400	131	162	8000	3800	P30x5	P30x5	Con 17E	6-3⅜x4	WG T9	U 4	No	Own 20B	2R	H	6.00	38.4	6x2½x7/32	C
114	............S11	2	2030	142	162	11000	4700	P32x6	DP32x6	Bud HS6	6-3⅜x4½	BL 20	U 4	No	Own 20B	2R	R	5.14	25.5	6x2½x7/32	P
115	............40CC	2½	3275	168	192	14000	5950	P36x6	DP36x6	Bud DW6	6-3¾x5	Fu MGU14	U 4	No	Own 30	2R	R	6.45	41.8	6x3x¼	P
116	............50DC	3	4130	161	169	20000	7200	P36x6	DP40x8	Bud DW6	6-3¾x5	BL 51-5	U 5	No	Own 60	2R	R	7.88	58.5	7x3½x¼	P
117	............60DC	3½	4745	175	192	25000	7800	P38x7	DP40x8	Bud BA6	6-4⅛x5⅛	Fu VU-16	U 5	No	Own 60	2R	R	7.88	58.5	7x3½x¼	P
118	............100AC	5	6615	230	180	26000	10000	B9.00/24	DB9.00/24	Con 21R	6-4⅜x4¾	Fu VU-16	U 5	No	Own 65	2R	R	7.88	58.5	8⅛x3½x3/16	P
119	230	5	6750	196	210	30000	11600	B10.50/24	DB10.50/24	Her GXA	6-4¾x5¾	BL 7312	U 4	3	Own 232	2R	R	8.7	89	11½x3x¼	T
120	............100B	7½	6900	220	180	32000	11200	B9.75/24	DB9.75/24	Bud GF6	6-4¾x6	BL 1714	U 4	No	Own 85AH	2R	R	7.04	49.7	8⅛x3½x3/16	P
121	240	7½	7900	174	240	40000	12900	B12.00/24	DB12.00/24	Her HXC	6-5¼x6	BL 7312	U 4	3	Own 245	2R	R	9.14	93	12¼x3¼x3/16	T
122	Reo......1A, (1C†)	1½	625	136	160	8000	2930	B6.00/20	P32x6	Own	4-3 11/16x4½	Own	U 4	No	Own	SF	H	5.6	36.9	7x2¾x7/32	C
123	(cont'd)..1B, (1D†)	1½	795	140	164	8500	3100	B6.00/20	P32x6	Own	6-3⅛x5	Own	U 4	No	Own	SF	H	5.28	34.8	7x2¾x7/32	C

Line Number	Piston Displacement	Compression Ratio	Torque lb. ft.	N.A.C.C. Rated H.P.	Max. Brake H.P. at R.P.M. Given	Valve Arrangement	Camshaft Drive	Piston Material	Engine Details: Main Bearings: Number and Diameter	Main Bearings: Length	Oiling System Type	Governor Make	Fuel Syst.: Carburetors Make	Fuel Feed	Electrical: Ignition System Make	Generator, Starter Make	Clutch Type and Make	Radiator Make	Universals Make	Front Axle: Make and Model	Steering Gear Make	Brakes: Service: Make, Location Type, Operation	Lining Area	Drum Material	Hand Type, Location	Body Mounting Data: Cab to Rear of Frame	Cab to Rear Axle	Width of Frame	Springs: Front	Springs: Rear	Auxiliary Type
1	260	5.3	166	29.4	69-2600	L	G	C	7-3	9⅞	PC	Ha	Zen	M	AL	AL	P.BB	Pe	Spi	Tim 31000H	Ros	L4IHV	327	Da	TX	120	78¾	32	38x2	57½x2½	½
2	299	4.9	195	33.5	82-2600	L	G	C	4-2¾	10	PC	Ha	Zen	M	AL	AL	D.Fu	Pe	Spi	Tim 33020H	Ros	L4IHV	367	Da	FD	140¼	93	32	39x2½	60x3	½
3	354	4.3	228	36.2	86-2300	L	G	C	4-2¾	10	FP	Ha	Zen	M	AL	AL	D.Fu	Pe	Spi	Tim 33020H	Ha	L4IHV	367	Da	FD	137¼	90	32	39x2½	60x3	½
4	393	4.8	260	42.1	94-2400	L	G	C	7-3	11½	PC	Ha	Zen	M	AL	AL	D.Fu	Pe	Spi	Tim 33000H	Ros	L4IHV	458	Da	FD	144	75	32	39x2½	60x3	½
5	462	4.6	310	46.0	97-2000	L	G	C	7-3	13⅞	PC	Wa	Zen	M	AL	AL	D.Fu	Pe	Spi	Tim 35020H	Ha	L4IHV	483	Da	FD	133	85¾	32 1/16	39x2½	60x3½	½
6	462	4.6	310	46.	97-2000	L	G	C	7-3	13⅞	PC	Wa	Zen	M	AL	AL	D.Fu	Pe	Spi	Tim 35000H	Ros	L4IHV	468	Da	FD	168	88	32⅛	44x3	60x3½	½
7	549	4.6	350	48.6	98-1850	L	G	C	4-3½	11⅛	PC	Wa	Zen	M	AL	AL	D.Fu	Ow	Spi	Tim 26450H	Ha	L4IHV	487	Da	FD	128½	81¼	36 3/16	44x3	60x3½	½
8	517	4.6	335	51.	100-1800	L	G	A	7-3	13⅞	PC	Wa	Zen	M	AL	AL	D.Fu	Pe	Spi	Tim27450TW	Ros	Ws4IA	690	Da	FD	168	88	34	44x3	60x3½	½
9	754	5.1	510	76.7	240-2900	H	C	C	4-3½	10	PC	No	Zen	M	DR	DR	dpLo	Ow	Blo	Tim27450TW	Ros	Ws4IA	690	Da	CD	......	......	34	44x3	60x4	½
10	298	4.7	190	33.7	67 2400	L	G	C	7-2⅝	13½	PC	No	Zen	M	AL	AL	D.BL	Mo	Spi	Tim 12703H	Ros	L4IH	302	p	CD	84	56	33	38x2¼	50x2½	N
11	339	4.7	223	38.4	74-2400	L	G	C	7-2⅝	13½	PC	Pe	Str	M	AL	AL	D.BL	Mo	Spi	Shu 5572	Ros	L4IHV	678	G	CD	104	62	33	40x2½	56x3	½
12	359	4.4	228	38.4	80-2200	L	G	C	7-3	15	PC	Pe	Str	V	AL	AL	D.BL	Mo	Spi	Shu 5572	Ros	L4IHV	678	G	FD	106	65	33	40x2½	56x3	½
13	428	4.4	280	45.9	94-2200	L	G	C	7-3	15	PC	Pe	Str	M	AL	AL	D.BL	Mo	Spi	Tim 15300	Ros	W2IM	615	G	CD	112	75	33	42x2½	56x3	½
14	428	4.4	280	5.9	94-2200	L	G	C	7-3	15	PC	Pe	Str	M	AL	AL	D.BL	Mo	Spi	Tim 16310	Ros	W2IM	802	G	TD	95	73	33	42x2½	56x3	½
15	428	4.4	280	45.9	94-2200	L	G	C	7-3	15	PC	Pe	Str	M	AL	AL	D.BL	Mo	Spi	Tim 16300	Ros	W2IM	802	G	TD	154½	99½	37	44x3	56x4	½
16	453	4.8	300	48.6	99-2200	L	G	C	7-3	15	PC	Pe	Str	M	AL	AL	D.BL	Mo	Spi	Tim 16300	Ros	W2IM	802	G	TD	154½	99½	37	44x3	56x4	½
17	529	4.5	350	51.3	112-2200	L	G	A	7-3	12½	PC	Ha	Str	M	LN	LN	P.BL	Mo	Spi	Tim 26450W	Ros	Ws4IA	576	G	TD	Opt	Opt	33	44x3	56x3	½
18	248	4.4	150	27.3	65-2800	L	C	C	7-2⅜	10 5/32	PC	No	Str	M	DR	DR	D.BL	Ch	Spi	Tim 30000H	Ros	L4IH	275	C	TX	96	58	34	37½x2¼	49¼x2½	N
19	248	4.4	150	27.3	65-2800	L	C	C	7-2⅜	10 5/32	PC	No	Str	M	DR	DR	D.BL	Ch	Spi	Tim 30000H	Ros	L4IH	275	C	TX	128	81	34	37½x2¼	50x2½	N
20	248	4.4	150	27.3	65-2800	L	C	C	7-2⅜	10 5/32	PC	No	Str	M	DR	DR	D.BL	Ch	Spi	Tim 31000H	Ros	L4IH	293	C	TX	128	81	34	37½x2¼	50x2½	½
21	315	4.6	200	33.7	72-2500	L	G	C	7-2⅝	12⅜	PC	No	Str	M	DR	DR	D.BL	Ch	Spi	Tim 33000H	Ros	L4IH	345	C	TX	128	81	34	37½x2¼	50½x2½	½
22	381	4.4	242	40.8	85-2500	L	G	C	7-2⅝	12½	PC	No	Str	M	DR	DR	D.BL	Ch	Spi	Tim 35000H	Ros	L4IHV	385	C	CD	128	81	34	39x2½	53x3	½
23	462	4.5	300	45.9	98-2000	L	G	A	7-3	13⅞	PC	Wa	Str	M	DR	DR	D.Fu	Ch	Spi	Tim 35000H	Ros	L4IHV	385	C	CD	128	81	34	39x2½	53x3	½
24	462	4.5	300	45.9	98-2000	L	G	A	7-3	13⅞	PC	Wa	Str	M	DR	DR	D.Fu	Ch	Spi	Tim 35000H	Ros	L4IHV	485	C	RI	128	81	34	39x2½	53x3	½
25	298	4.7	188	33.7	83-2800	L	G	C	7-3	9⅞	FP	Ha	Str	M	DR	DR	P.BL	Pe	Spi	Tim 31000H	Ros	L4IH	293	a	TD	114	72½	32	42x2½	54x2½	½
26	298	4.7	188	33.7	83-2800	L	G	C	7-3	9⅞	FP	Ha	Str	M	DR	DR	P.BL	Pe	Spi	Tim 31000H	Ros	L4IHV	343	a	TD	114	72½	32	42x2½	54x2½	½
27	393	4.5	260	42.1	103-2400	L	G	C	7-3	11½	FP	Ha	Str	M	DR	DR	P.BL	Ow	Spi	Tim 31000H	Ros	L4IH	436	a	TD	143½	91½	32	42x3	58½x3	½
28	331	4.5	200	33.7	73-2100	L	G	C	4-2½	9	FP	Bu	Str	V	DR	DR	D.BL	Pe	Spi	Tim 35020H	Ros	L4IHV	412	a	FD	107½	70	32	42x2½	54x3	½
29	411	4.5	272	40.8	103-2100	L	G	C	4-2½	9⅞	FP	Ha	Str	M	DR	DR	D.BL	Pe	Spi	Tim 35020H	Ros	L4IHV	412	a	TD	104½	68	32	42x2½	54x3	½
30	411	4.5	272	40.8	103-2100	L	G	C	4-2½	9⅞	FP	Ha	Str	M	DR	DR	D.BL	Pe	Spi	Tim 35020H	Ros	L4IHV	527	a	TD	104½	68	32	42x2½	54x3	½
31	479	4.5	318	51.2	10 -2000	L	G	C	7-3	14	PC	Ha	Zen	M	DR	DR	D.BL	Pe	Spi	Tim26450TW	Ros	Ws4IA	618	a	TD	144	95	33	42x3	58x3	½
32	517	4.5	335	51.3	106-2000	L	G	A	7-3	14	CC	Ha	Str	M	DR	DR	P.BL	Ow	Spi	Tim 35000H	Ros	L4IH	600	a	TD	143½	91½	32	42x3	58½x3	½
33	517	4.5	335	51.3	106-2000	L	G	A	7-3	14	CC	Ha	Str	M	DR	DR	P.BL	Ow	Spi	Tim35000TW	Ros	Ws4IA	600	a	TD	143½	91½	32	42x3	58½x3	½
34	479	4.5	318	51.2	102-2000	L	G	C	7-3	14	PC	Ha	Zen	M	DR	DR	D.BL	Pe	Spi	Tim26450TW	Ros	Ws4IA	623	a	TD	144	95	33	42x3	58x3	½
35	248	5.1	145	25.4	61-2600	L	G	C	7-2⅝	11 11/16	FP	Ha	Str	M	NE	NE	D.Ow	Ow	Spi	Own BL	Ge	L4IH	302	P	FX	109	64 3/16	33 3/16	40⅞x2½	52¾x2½	N
36	309	4.7	183	31.5	75-2500	L	G	C	7-2⅝	11 11/16	FP	Ha	Str	M	NE	NE	D.Ow	Ow	Spi	Own BG	Own	O4IMV	427	a	FX	96	54½	33 3/16	42x2½	54x3	N
37	309	4.7	183	31.5	75-2500	L	G	C	7-2⅝	11 11/16	FP	Ha	Str	M	NE	NE	P.Ow	Ow	Spi	Own BG	Ros	O4IMV	427	a	FD	132	84½	33 1/16	44x2½	54x3	½
38	283	4.4	176	28.9	63-2100	L	G	C	3-3	8 7/32	PS	Ow	Str	G	NE	NE	D.Ow	Ow	Spi	Own AB	Own	O4IMV	471	a	FX	120	73	33¼	42¼x3	48x3	N
39	283	4.4	176	28.9	63-2100	L	G	C	3-3	8 7/32	PS	Ow	Str	G	NE	NE	D.Ow	Ow	Spi	Own AB	Own	O4IMV	471	a	FX	120	73	33¼	42¼x3	56⅛x3½	N
40	309	4.7	183	31.5	75-2500	L	G	C	7-2⅝	11 11/16	FP	Ha	Str	M	NE	NE	D.Ow	Ow	Spi	Own AB	Own	O4IMV	471	a	FX	120	73	33¼	42¼x3	48x3	N
41	309	4.7	183	31.5	75-2500	L	G	C	7-2⅝	11 11/16	FP	Ha	Str	M	NE	NE	D.Ow	Ow	Spi	Own AB	Own	O4IMV	471	a	FX	120	73	33¼	42¼x3	56⅛x3½	N
42	414	4.5	261	38.4	94-2400	L	G	C	7-3	13 3/16	FP	Ha	Str	M	RB	NE	P.Ow	Ow	Spi	Own BM	Ros	O4IMV	427	a	FX	156	108½	33¼	44x2½	54x3½	½
43	414	4.5	261	38.4	94-2400	L	G	C	7-3	13 3/16	FP	Ha	Str	M	RB	NE	P.Ow	Ow	Spi	Own BC	Own	O4IMV	610	a	FX	120	73	33¼	43¾x3	56⅛x3½	N
44	414	4.5	261	38.4	94-2400	L	G	C	7-3	13 3/16	FP	Ha	Str	M	RB	NE	P.Ow	Ow	Spi	Own BC	Own	O4IMV	590	a	JX	120	73	33⅜	43¾x3	54x3	N
45	468	4.7	292	43.4	104-2300	L	G	C	7-3	13 3/16	FP	Ha	Str	M	NE	NE	P.Ow	Ow	Spi	Own BC	Ros	O4IMV	619	a	JX	144	91	33 3/16	53 3/16x3	54x3	N
46	468	4.7	292	43.4	104-2300	L	G	C	7-3	13 3/16	FP	Ha	Str	M	NE	NE	P.Ow	Ow	Spi	Own BC	Ros	O4IMV	619	a	FX	144	91	33 3/16	53 3/16x3	56⅛x3½	N
47	525	4.8	350	48.6	125-2300	L	G	C	4-3½	11 3/16	PS	Ow	Str	M	RB	LN	P.Ow	Ow	Cle	Own AK	Ros	O4IMV	618	a	FD	120	79	33¼	50x3½	59 3/16x4	¼
48	611	5.0	398	54.2	128-2200	L	G	C	4-3½	11 3/16	PS	Ow	Str	M	RB	NE	P.Ow	Ow	Cle	Own BQ	Ros	O4IMV	618	a	FX	150	102	33¼	50x3½	58 3/16x3½	½
49	471	3.9	320	40.0	75-1800	L	G	C	3-3	10 11/16	PS	Ow	Str	G	RB	NS	P.Ow	Ow	Spi	Own AK	Own	O4IMV	492	a	JX	132	93 3/16	37½	48x3½	52x4	½
50	471	3.9	320	40.0	75-1800	L	G	C	3-3	10 11/16	PS	Ow	Str	G	RB	NS	P.Ow	Ow	Spi	Own AK	Own	O4IMV	492	a	FX	132	93 3/16	37½	48x3½	56x4	½
51	611	5.0	398	54.2	128-2200	L	G	C	4-3½	11 3/16	PS	Ow	Str	M	RB	LN	P.Ow	Ow	Spi	Own AK	Ros	O4IMV	561	a	FD	132	93	37⅝	47 3/16x3½	58⅛x4	¼
52	471	3.9	320	40.0	75-1800	L	G	C	3-3	10 11/16	PS	Ow	Str	G	RB	NS	P.Ow	Ow	Spi	Own AC	Own	OJXM	194	C	2I	156	104	37½	46x3½	52x4	½
53	471	3.9	320	40.0	75-1800	L	G	C	3-3	10 11/16	PS	Ow	Str	G	RB	NS	P.Ow	Ow	Spi	Own AC	Own	OJXM	194	C	2I	156	104	37½	46x3½	52x4	½
54	471	3.9	320	40.0	75-1800	L	G	C	3-3	10 11/16	PS	Ow	Str	G	RB	NS	P.Ow	Ow	Spi	Own AC	Own	OJXM	194	C	2I	156	104	37½	46x3½	52x4	½
55	611	5.0	398	54.2	128-2200	L	G	C	4-3½	11 3/16	PS	Ow	Str	M	RB	LN	P.Ow	Ow	Spi	Own AK	Ros	O4IMV	755	C	JX	156	105	37½	48x3½	52x4	½
56	706	4.8	427	60.0	138-1900	L	G	S	4-3 3/16	11 3/16	PS	Ow	Str	G	RB	LN	P.Ow	Ow	Spi	Own AC	Ros	O2IMV	284	C	JX	180	108⅞	37½	46 3/16x3½	52x4	½
57	282	5.3	190	33.7	73-2800	L	G	A	7-2½	10 11/16	CC	No	Zen	M	DR	DR	P.BL	Yo	Spi	Own 1A	Ros	T2/4IH	238	P	FD	Opt	Opt	34	40x2½	50x2½	O
58	339	4.7	215	38.4	76-2400	L	G	A	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	P.BL	Yo	Blo	Own 1	Ros	W2/4IH	350	P	FD	Opt	Opt	34	40x2½	50x2½	O
59	339	4.7	215	38.4	76-2400	L	G	A	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	D.Fu	Yo	Blo	Own 1	Ros	W2/4IH	350	a	FD	Opt	Opt	34	40x3	50x3	O
60	383	4.7	265	43.3	92-2400	L	G	A	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	D.Fu	Yo	Blo	Own 2A	Ros	W2/4IH	812	a	FD	Opt	Opt	34	40x3	50x3	O
61	428	4.4	280	45.9	94-2200	L	G	A	7-3	15	PC	Ha	Zen	M	DR	DR	D.Fu	Yo	Blo	Own 2	Ros	W2/4IA	812	a	FD	Opt	Opt	34	44x3	54x3½	O
62	479	4.4	320	51.3	103-2200	L	G	A	7-3	15	PC	Ha	Zen	M	DR	DR	D.Fu	Yo	Blo	Own 2	Ros	W2/4IA	918	a	FD	Opt	Opt	34	44x3	54x3½	O
63	529	4.9	350	51.3	115-2200	L	G	A	7-3	15	PC	Ha	Zen	M	DR	DR	D.Fu	Yo	Blo	Own 3	Ros	W2/4IA	918	a	FD	Opt	Opt	34	44x3	54x3½	O
64	707	4.5	455	60	150-2000	L	G	A	7-3½	17	PC	Ha	Zen	M	DR	DR	dp.BL	Yo	Blo	Own 3A	Ros	Ws2/4IA	974	a	2FD	Opt	Opt	34	52x4	54x4	O
65	855	4.5	550	72.8	180-2000	L	G	A	7-3½	17	PC	Ha	Zen	M	DR	DR	dp.BL	Yo	Blo	Own 4	Ros	Ws2/4IA	974	a	2FD	Opt	Opt	34	52x4	54x4	O
66	282	5.0	176	33.8	73-2800	L	C	C	7-2½	10 11/16	PC	No	Zen	M	AL	AL	P.BL	Lo	Cle	Tim 30000H	Ros	L4IH	270	a	TD	132	78	34	40x2½	54x3	½
67	282	5.0	176	33.8	73-2800	L	C	C	7-2½	10 11/16	PC	No	Zen	M	AL	AL	P.BL	Lo	Cle	Tim 31000H	Ros	L4IH	315	a	TD	132	78	34	40x2½	54x3	½
68	339	4.7	212	38.4	76-2400	L	G	C	7-2⅝	13¼	PC	No	Zen	M	AL	AL	P.BL	Lo	Cle	Tim 33020H	Ros	L4IH	374	a	TD	156	101	34	40x2½	54x3	½
69	339	4.7	212	38.4	76-2400	L	G	C	7-2⅝	13¼	PC	No	Zen	M	AL	AL	P.BL	Lo	Cle	Tim 33020H	Ros	L4IH	405	a	TD	156	101	34	40x2½	54x3	½
70	383	4.4	262	43.3	92-2400	L	G	A	7-2⅝	13¼	PC	No	Zen	M	AL	AL	P.BL	Lo	Cle	Tim 33020H	Ros	L4IH	405	a	FD	156	99⅝	34	41½x2½	54x3	½
71	383	4.4	262	43.3	92-2400	L	G	A	7-2⅝	13¼	PC	No	Zen	M	AL	AL	P.BL	Lo	Cle	Tim 35120H	Ros	L4IH	494	a	FD	156	99⅝	34	40x2½	54x3½	½
72	501	4.9	330	48.6	110-2200	L	G	A	7-3	12½	PC	Mo	Zen	M	AL	AL	P.BL	Lo	Cle	Tim26450TW	Ros	Ws4IA	620	a	FD	168	112¼	34	42x3	56x3½	½
73	222	4.9	142	27.3	68-2600	L	G	A	4-2⅜	7⅝	FP	Ha	Zen	M	AL	AL	P.BL	Mo	Pet	Tim 11703H	Ros	L4IH	229	P	ID	108	72	34	40x2½	50x3	N
74	255	5.1	170	27.3	68-2600	L	G	A	4-2⅜	7⅝	FP	Ha	Zen	M	AL	AL	P.BL	Mo	Pet	Tim 12703H	Ros	L4IH	240	G	ID	120	84	34	40x2½	50x3	½
75	381	4.6	240	45.9	100-2400	L	G	A	7-3	13⅞	FP	Wa	Zen	M	AL	AL	P.BL	Mo	Pet	Tim 14703H	Ros	L4IH	400	G	ID	132	96	34	40x2½	50x3	½
76	462	4.6	300	45.9	100-2400	L	G	A	7-3	13⅞	FP	Wa	Zen	M	AL	AL	D.BL	Mo	Pet	Tim 15733	Ros	L4IH	520	G	ID	132	96	34	40x3	50x3	½
77	517	4.5	335	48.6	110-2400	L	G	A	7-3	13⅞	FP	Wa	Zen	M	AL	AL	D.BL	Mo	Pet	Tim 17300	Ros	L4IH	615	G	ID	132	96	34	40x3	50x4	½
78	420	5.2	310	45	140-2800	L	G	C	5-2⅝	12	FP	Ha	Zen	M	AL	AL	D.BL	Mo	Pet	Tim 26450H	Ros	L4IH	690	G	ID	180	120	33	44x3	56x4	½
79	282	5.3	176	33.7	72-2500	L	G	C	7-2½	10 11/16	PC	Ha	Str	M	RB	LN	D.BL	Mo	Blo	Own LB	Ros	O4XM	142	a	2I	112¼	82⅞	34	44x2½	50x3	N
80	339	4.7	210	38.4	70-2000	L	G	C	7-2⅝	13¼	PC	Ha	Str	M	RB	LN	D.BL	Mo	Blo	Own LC	Ros	O4XM	142	a	2I	112¼	82⅞	34	44x2½	50x3	½
81	383	4.7	265	43.3	86-2000	L	G	C	7-2⅝	13¼	PC	Ha	Zen	M	RB	RB	D.BL	Mo	Blo	Own H2A	Ros	O4XM	142	a	2I	112¼	82⅞	34	44x2½	50x3	½
82	428	4.4	278	45.9	90-2000	L	G	C	7-3	15	PC	Ha	Zen	M	RB	LN	D.BL	Mo	Blo	Own H2B	Ros	O4XM	142	a	2I	112¼	82⅞	34	44x2½	50x3	½
83	501	4.9	330	48.6	106-2000	L	G	C	7-3	15	PC	Ha	Zen	M	NE	LN	D.BL	Mo	Blo	Own H2C	Ros	O4XM	142	a	2I	112¼	82⅞	34	44x2½	50x3	½
84	501	4.9	330	48.6	106-2000	L	G	A	7-3	15	PC	Ha	Zen	M	NE	LN	D.BL	Mo	Blo	Own Y2D	Ros	O4XM	170	a	2I	112¼	82⅞	34	44x2½	50x3	½
85	529	4.9	350	51.2	112-2000	L	G	A	7-3	15	PC	Ha	Zen	M	RB	LN	D.BL	Mo	Blo	Own FHX	Ros	O4XM	170	a	2I	112¼	82⅞	34	44x2½	50x3	½
86	529	4.9	350	51.2	112-2000	L	G	A	7-3	15	PC	Ha	Zen	M	RB	LN	D.BL	Mo	Blo	Own F2A	Ros	B4IMV	666	a	TX	112¼	82⅞	34	44x3	50x4	½
87	385	5.0	274	39.2	125-2800	L	C	A	9-2⅝	14⅛	CC	Ha	Str	M	DR	DR	P.Lo	Lo	Cle	Tim 14706	Ha	B4IM	399	D	CD	116¾	62½	34	38x2½	56x3	½
88	298	4.7	190	33.7	70-2600	L	G	C	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 14706	Ha	B4IM	399	D	TD	113½	59½	34	38x2½	56x3	½
89	361	4.7	229	40.3	77-2400	L	G	C	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 14706	Ha	B4IM	399	D	CD	143½	89½	34	38x2½	56x3	½
90	361	4.7	229	40.3	77-2400	L	G	C	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 15733	Ha	B4IA	473	D	CD	119½	65	34	41x2½	56x3	½
91	428	4.6	280	46.	94-2200	L	G	A	7-3	15	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 15733	Ha	B4IA	473	D	CD	118¼	63¾	34	41x2½	56x3	½
92	479	4.7	318	51.3	104-2200	L	G	A	7-3	15	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 15733	Ha	B4IA	473	D	CD	118¼	63¾	34	41x2½	56x3	..
93	361	4.7	229	40.3	77-2400	L	G	C	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 15733	Ha	B4IA	473	D	CD	119½	65	34	41x2½	56x3	½
94	428	4.6	280	46.	94-2200	L	G	A	7-3	15	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 15733	Ha	B4IA	473	D	CD	118¼	63¾	34	41x2½	56x3	½
95	428	4.6	280	46.	94-2200	L	G	A	7-3	15	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 15733	Ha	T4IA	618	D	CD	168¼	133¾	34	41x2½	56x3	½
96	501	4.6	330	48.6	110-2200	L	G	A	7-3	12½	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 15733	Ha	B4IA	473	D	CD	118¼	63¾	34	41x2½	56x3	½
97	479	4.6	280	46.	94-2200	L	G	A	7-3	15	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 15733	Ha	T4IA	618	D	CD	168¼	133¾	34	41x2½	56x3	½
98	501	4.6	330	48.6	110-2200	L	G	A	7-3	12½	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 15733	Ha	T4IA	618	D	CD	168¼	133¾	34	41x2½	56x3	½
99	501	4.6	330	48.6	110-2200	L	G	A	7-3	12½	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 26050	Ha	T4IA	618	D	CD	132¾	78¼	34	41x3	56x3½	½
100	611	4.5	410	54.1	130-2000	L	G	A	7-3½	16⅝	PC	Ha	Str	M	DR	DR	P.Lo	Lo	Spi	Tim 26050	Ros	T4IA	618	D	TX	117	62½	34	41x3	56x3½	½
101	361	4.7	229	40.3	77-2400	L	G	C	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 14706	Ha	B4IM	399	D	CD	93⅞	59⅜	34	38x2½	56x3	..
102	428	4.6	280	46.	94-2200	L	G	A	7-3	15	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 15733	Ha	B4IA	473	D	CD	98¼	63¾	34	41x2½	56x3	..
103	501	4.6	330	48.6	110-2200	L	G	A	7-3	12½	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 26050	Ha	TO4IA	720	D	CD	132¾	78¼	34	41x3	56x4	½
104	611	4.5	410	54.1	130-2000	L	G	A	7-3½	16⅝	PC	Ha	Str	M	DR	DR	P.Lo	Lo	Spi	Tim 26050	Ros	TO4IA	720	D	TX	127	72½	34	41x3	56x4	½
105	479	4.6	318	51.3	104-2200	L	G	A	7-3	15	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 26050	Ha	TO4IA	720	D	CD	132¾	78¼	34	41x3	56x4	½
106	501	4.6	330	48.6	110-2200	L	G	A	7-3	12½	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 26050	Ha	T4IA	618	D	CD	172⅞	118⅜	34	41x3	56x4	½
107	611	4.5	410	54.1	130-2000	L	G	A	7-3½	16⅝	PC	Ha	Str	M	DR	DR	P.Lo	Lo	Spi	Tim 26050	Ros	TO4IA	720	D	TX	167	112½	34	41x3	56x4	½
108	611	4.5	410	54.1	130-2000	L	G	A	7-3½	16⅝	PC	Ha	Str	M	DR	DR	P.Lo	Lo	Spi	Tim 27050	Ros	TO4IA	720	D	TX	137¾	82½	34	41x3	56x4	½
109	361	4.7	229	40.3	77-2400	L	G	C	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 14706	Ha	B4IM	399	D	CD	93⅞	59⅜	34	38x2½	56x3	..
110	501	4.6	330	48.6	110-2200	L	G	A	7-3	12½	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 15733	Ha	B4IA	473	D	CD	98¼	63¾	34	41x2½	56x3	..
111	501	4.6	330	48.6	110-2200	L	G	A	7-3	12½	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 26050	Ha	T4IA	618	D	TX	112⅞	78⅜	34	41x3	56x3½	..
112	779	4.5	510	66.1	150-1800	L	G	A	7-3½	16⅝	PC	Ha	Str	M	DR	DR	P.Lo	Lo	Spi	Tim 27050	Ros	TO4IA	720	D	TX	137	102½	34	41x3	56x4	½
113	214	5.0	132	27.3	52-2200	L	G	A	7-2⅛	9 11/16	PC	No	Str	V	AL	AL	P.BB	Lo	Blo	Col 5540	Ha	L4IH	297	aP	FX	106¾	63	34	36x2¼	48x2½	N
114	241	4.5	143	27.3	53-2200	L	G	C	4-2⅜	8	PC	No	Zen	V	AL	AL	P.BL	Lo	Blo	Col 5530	Ha	L4IH	297	aP	FX	133½	83	34	36x2¼	48x2½	½
115	331	4.5	202	33.7	64-2100	L	G	C	4-2½	9	PC	No	Zen	V	AL	AL	D.Fu	Lo	Blo	Tim 35000H	Ha	L4IH	394	aP	FX	144	90	34	40x2¼	50x3	½
116	331	4.5	202	33.7	64-2100	L	G	C	4-2½	9	PC	No	Zen	V	AL	AL	D.BL	Lo	Blo	Tim 35000H	Ha	L4IH	584	aP	FX	144	82	34	40x2¼	54x3	½
117	411	4.5	270	40.8	83-2100	L	G	C	4-2½	9⅛	PC	Bu	Zen	V	AL	AL	Fu	Lo	Blo	Tim 35000H	Ha	L4IH	584	aP	FX	156	97½	34	42x2½	54x3	½
118	420	4.2	268	45.9	100-2200	L	C	C	7-2¾	12 11/16	PC	No	Str	V	AL	AL	D.Fu	Lo	Blo	Tim 1660W	Ha	4IA	447	aP	FX	216	148	34	42x3	60x4	½
119	611	4.5	400	54.	126-2000	L	G	A	7-3½	16⅝	PC	Mo	Zen	M	AL	LN	P.Lo	Mo	Spi	Shu 1677-1	Ros	L4IHV	529	DP	FX	168	104½	34	44x3½	56x4	½
120	638	4.3	415	54.1	118-1850	L	G	C	4-3	10 3/16	PC	Ha	Zen	M	AL	LN	P.BL	Mo	Blo	Tim 27450	Ha	L4IH	480	DP	FX	192	134	34	42x3	56x4	½
121	779	4.5	510	66.1	164-2000	L	G	A	7-3½	16⅝	PC	Mo	Zen	M	AL	LN	P.Lo	Mo	Spi	Shu 1679-2	Ros	C4IA	637	DP	FX	126	82½	34	44x3½	56x5	½
122	205	4.9	136	23.3	51-2500	L	G	B	5-3 3/16	8 3/16	FP	No	Zen	M	DR	DR	P.Lo	Pe	Cle	Own	Ros	L4IH	246	P	TX	102 3/16	60	34	40x2	50x2½	O
123	230	5.3	152	23.4	68-2800	L	C	A	7-2 3/16	12	CC	No	Zen	M	DR	DR	P.Lo	Ow	Cle	Own	Ros	L4IH	246	P	TX	102	60	34	40x2	50x2½	O

Line Number	MAKE AND MODEL	Wheels Driven—6-Wheelers	GENERAL (See Keynote) Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight	Chassis Wt. (Stripped)	TIRE SIZE Front	Rear	MAJOR UNITS ENGINE Make and Model	ENGINE No. of Cylinders Bore and Stroke	TRANSMISSION Make and Model	TRANSMISSION Location and Forward Speeds	TRANSMISSION Aux. Location and Speeds	REAR AXLE Make and Model	REAR AXLE Gear and Type	REAR AXLE Drive and Torque	REAR AXLE GEAR RATIOS In High	REAR AXLE GEAR RATIOS In Low	FRAME Side Rail Dimensions	FRAME Type
1	Reo	2B-2D	2	1095	166	166	11000	3865	B6.50/20	DB6.50/20	Own	6-3⅜x5	Own	U 4	No	Own	SF	H	5.83	38.4	7x3x¼	C
2	(conc'd)	4H, 4J, 4K	4	3070	170	190	20000	6280	B9.00/20	DB9.00/20	Own	8-3⅜x5	Own	U 4	Op	Own	SF	H	5.14	40.5	10x3x¼	C
3	Schacht	10HA	2-3	1570	156	195	11500	4072	B7.00/20	B7.00/20	Con 16C	6-3¾x4⅝	Fu Wo	U 4	No	Tim	BF	H	5.83	31.2	6x3x¼	P
4		20HA	2½–4	2185	160	207	15300	4783	B8.25/20	DB8.25/20	Her WXB	6-3⅜x4½	Fu MLU	U 4	No	Tim	BF	H	6.06	38.5	6x3x¼	P
5		25HA	3–4½	2695	146	213	19500	5750	B9.00/20	DB9.00/20	Her WXC	6-4x4½	Fu MGU	U 4	No	Tim	BF	R	6.02	39.2	7x3x¼	P
6		28HA	4–5½	3050	146	227	23000	6600	B9.75/20	DB9.75/20	Her WXC	6-4x4½	Fu MGU	U 4	No	Tim	BF	R	6.83	43.8	7x3x¼	P
7		30HA	4½–6	3295	146	227	23000	6800	B9.75/20	DB9.75/20	Her WXC	6-4x4½	Fu MGU	U 4	No	Wis	2F	R	7.14	46.4	7x3x¼	P
8		35HA	5–7	3725	146	227	24000	7400	B9.75/20	DB9.75/20	Her WXC2	6-4⅛x4½	Fu MGU	U 4	No	Own	2F	R	8.00	52.0	8½x3x⅜	P
9		40H	5–7	4295	154	235	25500	7600	B9.75/20	DB9.75/20	Her YXC	6-4⅜x4¾	Fu VUOG	U 5	No	Own	2F	R	7.07	49.7	8½x3x⅜	P
10		40HB	7–9	4695	154	235	29500	7750	B10.50/20	DB10.50/20	Her YXC	6-4⅜x4¾	Fu VUOG	U 5	No	Wis	2F	R	7.07	49.7	8½x3x⅜	P
11		66HA	8–11	5895	152	247	35000	9820	B10.50/24	DB10.50/24	Her RXC	6-4⅜x5¼	Fu VUOG	U 5	No	Wis	2F	R	7.07	49.8	8½x3x⅜	P
12		(T) TR, HA	10	3645	148	174	35000	6250	B9.75/20	DB9.75/20	Her YXC3	6-4⅜x4¾	Fu VUOG	U 5	No	Tim	BF	R	7.8	55.1	7x3x¼	P
13		(T) TRDA	10	3895	148	174	39000	6450	B9.75/20	DB9.75/20	Her YXC3	6-4⅜x4¾	Fu VUOG	U 5	No	Own	2F	R	7.8	56.8	7x3x¼	P
14	Sterling	FB30	1½	795	142	162	.....	3350	B6.50/20	DB6.50/20	Con 25A	6-3¾x4	Wa T9	U 4	No	Tim	BF	H	5.66	36.2	6x2⅝x⅛	C
15		FB40	1½–2	995	142	162	.....	3450	B6.50/20	DB6.50/20	Con 25A	6-3¾x4	Wa T9	U 4	No	Tim	BF	H	5.66	36.2	6x2⅝x⅛	C
16		FB45	2	1485	159	182	.....	4230	B6.50/20	DB6.50/20	Con 16C	6-3¾x4⅝	Wa T9	U 4	No	Tim	BF	R	5.66	37.6	6x2⅝x¼	C
17		FB50	2–2½	1195	142	182	.....	3650	B7.00/20	DB7.00/20	Con 25A	6-3⅜x4	Wa T9	U 4	No	Tim	BF	H	5.66	36.2	6x2⅝x⅛	P
18		FB55	2–2½	1850	159	182	.....	4950	B7.00/20	DB7.00/20	Con 16C	6-3⅜x4⅝	BL 214	U 4	No	Tim	BF	R	5.83	37.3	6x2⅝x¼	P
19		FB65	2½	2450	174	204	.....	5550	B7.50/20	DB7.50/20	Wau 6MS	6-3¾x4⅜	Own UC6	U 4	No	Tim	BF	R	6.16	39.1	10x3¼x¼	C
20		FB60	2½–3	1695	142	162	.....	4150	B7.00/20	DB7.00/20	Wau TL	6-3⅜x4⅜	Wa T9	U 4	No	Tim	BF	H	5.83	37.3	6x2⅝x⅛	C
21		FB65 Spec	2½–3	2650	174	204	.....	5755	B7 50/20	B7.50/20	Wau ML	6-4x4¾	Own UC7	U 5	No	Tim	BF	R	7.4	52.7	10x3¼x¼	C
22		FB80	3–4	3080	174	204	.....	6480	B8.25/20	DB8.25/20	Wau 6MS	6-3¾x4¾	Own UC6	U 4	Op	Tim	BF	R	7.80	49.5	10x3¼x¼	C
23		FD80	3–4	3275	174	204	.....	6680	B8.25/20	DB8.25/20	Wau 6ML	6-4x4¾	Own UC7	U 5	Op	Wis	2F	R	7.8	55.3	10x3¼x¼	C
24		FB80 Spec	3½–4	3275	174	204	.....	6680	B8.25/20	B8.25/20	Wau ML	6-4x4¾	Own UC7	U 5	No	Tim	BF	R	7.8	55.6	10x3¼x¼	C
25		FC90	4	4200	174	204	.....	7480	B9.00/20	DB9.00/20	Wau 6MK	6-4⅛x4¾	Own UC7	U 5	Op	Own	CD	R	8.66	61.7	10x3¼x¼	C
26		FD90	4	3550	174	204	.....	7480	B9.00/20	B9.00/20	Wau MK	6-4⅛x4¾	Own UC7	U 5	No	Wis	2F	R	8.57	61.0	10x3¼x¼	C
27		FW97, FD97	4–5	4225	192	222	.....	7955	P36x8	DP36x8	Wau 6MK	6-4⅜x4¾	Own UC2	U 4	Op	Tim	w/2	R	7.75	51.6	12x3¼x¼	C
28		FW97S, FD97S	4–5	4490	192	222	.....	8200	P36x8	DP36x8	Wau 6SRL	6-4⅜x5½	Own UC2	U 4	Op	Tim	w/2	R	7.75	51.6	12x3¼x¼	C
29		FC100	5–5½	4950	192	222	.....	7750	P36x8	DP36x8	Wau 6MK	6-4⅛x4¾	Own UC2	U 4	Op	Own	CD	R	9.3	61.2	12x3¼x¼	C
30		FC105	5½	5150	192	222	.....	8000	B9.00/20	DB9.00/20	Wau 6SRS	6-4⅛x5½	Own UC	U 5	Op	Own	CD	R	8.66	61.7	12x3¼x¼	C
31		FW115, FD115	5–6	4805	192	222	.....	8750	P40x8	DP40x8	Wau 6SRL	6-4⅜x5½	Own UC2	U 4	Op	Tim	w/2	R	8.20	54.6	12x3¼x¼	C
32		FC107	5–6	5200	192	222	.....	8200	P36x8	DP36x8	Wau 6SRL	6-4⅜x5½	Own UC2	U 4	Op	Own	CD	R	8.20	54.6	12x3¼x¼	C
33		FC120	6–7	5350	192	222	.....	8550	P40x8	DP40x8	Wau 6MK	6-4⅛x4¾	Own UC2	U 4	Op	Own	CD	R	9.3	62.2	12x3¼x¼	C
34		FC120S	7½	5650	192	222	.....	8400	B9.75/20	DB9.75/20	Wau 6SRL	6-4⅜x5½	Own UC2	U 4	J 3	Own	CD	R	8.66	61.7	12x3¼x¼	C
35		FW140, FD140	7–8	6070	192	222	.....	10050	P40x8	DP42x9	Wau SRL	6-4⅜x5½	Own UC2	U 4	Op	Tim	w/2	R	10.0	66.6	15x3¼x¼	C
36		FC135	7–8	5825	192	222	.....	8900	P40x8	DP40x8	Wau SRL	6-4⅜x5½	Own UC2	U 4	Op	Own	CD	R	9.3	62.2	15x3¼x¼	C
37		FC140	8–8½	6500	200	230	.....	9350	P40x8	DP40x8	Wau RB	6-4⅛x5¾	Own UC2	U 4	Op	Own	CD	R	8.3	55.2	15x3¼x¼	C
38		FC145	8–8½	6925	200	230	.....	10100	P40x8	DP40x8	Wau AB	6-4⅛x5¾	Own UC8	U 4	Op	Own	CD	R	9.4	58.1	15x3¼x¼	C
39		FW170, FD170	9½x10½	6070	200	230	.....	10550	P40x8	DP44x10	Wau AB	6-4⅛x5¾	Own UC8	U 4	Op	Tim	w/2	R	10.0	62.7	15x3¼x¼	C
40		FC170	9½x10½	7595	200	230	.....	10550	P40x8	DP42x9	Wau RB	6-5x5¾	Own UC8	U 4	Op	Own	CD	R	9.4	58.9	15x3¼x¼	C
41	Stewart	30	1	695	130	160	.....	2977	B6.50/20	B6.50/20	Lyc AFE	4-3¼x4½	War	U 4	No	Cla	SF	H	5.6	35.8	6x2¼x⅞	T
42		30X	1	795	130	160	.....	3018	B6.50/20	B6.50/20	Lyc WTG	6-3x4¾	WG T9	U 4	No	Cla	SF	H	6.38	40.8	6x2¼x⅞	T
43		42X	1½	795	134	176	.....	3525	B6.50/20	B6.50/20	Lyc SA	6-3¼x4½	WG	U 4	No	Cla	SF	H	5.6	35.8	7½x2¾x⅞	T
44		40XA	1½	995	145	176	.....	3460	B6.50/20	DB6.50/20	Lyc SA	6-3¼x4½	War	U 4	No	Cla	SF	H	5.6	35.8	7½x2¾x⅞	T
45		43X	2	995	145	176	.....	4005	B6.50/20	DB6 50/20	Lyc SB	6-3⅜x4½	WG	U 4	No	Cla	SF	H	6.3	22.	7½x2¾x⅞	T
46		50X	2	1195	145	176	.....	4015	B6.50/20	DB6.50/20	Lyc SB	6-3⅜x4½	War	U 4	No	Cla	SF	H	6.37	22.0	7½x2¾x⅞	T
47		29XS	2	1695	145	190	.....	4990	B.700/20	DB7.00/20	Lyc ASD	6-3¾x4½	Ful	U 4	No	Cla	SF	R	6.37	44.4	7½x2¾x⅞	T
48		32X	2½	1990	165	220	.....	5260	B7.00/20	DB7.00/20	Lyc ASD	6-3¾x4½	Fu	U 4	No	Cla	SF	R	6.37	44.4	7½x2¾x¾	T
49		58-8	2½	2390	170	226	.....	5970	B7.50/20	DB7.50/20	Lyc HFA	8-3⅜x4½	Fu	U 4	No	Cla	SF	H	7.25	47.0	9x2¾x⅞	T
50		18X	3	2690	165	220	.....	6400	B7.50/20	DB7.50/20	Lyc TS	6-3⅞x5	Fu	U 4	No	Tim	WF	H	7.25	47.5	9x2¾x⅞	T
51		48-8	3	2990	170	241	.....	6750	B8.25/20	DB8.25/20	Lyc AEC	8-3¾x4¾	BL	U 4	No	Cla	SF	F	7.12	50.1	9x2¾x⅞	T
52		19X	3½	3690	165	235	.....	7110	B9.00/20	DB9.00/20	Lyc TS	6-3⅞x5	Fu	U 4	A 3	Tim	WF	R	7.25	127.	9x2¾x⅞	T
53		38-6	3½	3990	170	241	.....	7600	B9.00/20	DB9.00/20	Wau 6SRL	6-4⅜x5½	BL	U 4	A 3	Tim	DF	.	7.3	147.	9x2¾x⅞	T
54		38-8	3½	3990	170	241	.....	7600	B9.00/20	DB9.00/20	Lyc AE	8-3¾x4¾	BL	U 4	A 3	Tim	DF	.	7.3	147.	9x2¾x⅞	T
55		31X	5	5190	165	235	.....	9340	B9.75/20	DB9.75/20	Wau 6SRK	6-4⅝x5½	BL	U 4	A 3	Tim	WF	R	8.2	15.1	9⅛x2¾x⅜	T
56		27XS	7	6190	165	235	.....	10300	B10.50/24	DB10.50/24	Wau 6SRK	6-4⅝x5½	BL	U 4	A 3	Tim	WF	R	6.56	93.8	9⅛x2¾x⅜	T
57	Studebaker	S21	1½	670	130	165	8000	3110	B6.00/20	P32x6	Own	6-3¼x4⅝	War T9	U 4	No	Cla B373	SF	H	5.66	35.8	6x2¾x⅛	T
58		S41	2	895	141	165	10000	3930	B6.50/20	DB6.50/20	Own	6-3¼x4⅝	War T9	U 4	No	Tim 54200	SF	H	6.8	43.5	7x2¾x⅞	T
59		S120	3	1350	141	183	16000	4855	B6.50/20	DP32x6	Own	6-3¼x4⅝	War T9	U 4	A 2	Tim 58200	SF	H	6.8	66.1	8x2¾x⅛	T
60	Walter	FN	2½–3	4500	120	144	15000	6500	B9.00/20	B9.00/20	Own 6MK	6-4⅛x4¾	Own FN	U 5	No	Own FN	2D	H	7.0	70.0	7x2¾x¾	P
61		FM	3½–4	5500	120	144	18000	7500	B9.00/20	DB9.00/20	Own 6SRL	6-4⅜x5½	Own FM	U 5	No	Own FM	2D	H	6.00	60.0	12x2¾x¼	P
62		FKD	4–6	6300	118	136	24000	8500	B9.00/24	DB9.00/24	Own 6SRL	6-4⅜x5½	Own FK	U 5	No	Own FK	2D	H	8.50	85.0	11x3x¼	P
63		FCS	5–7	7200	136	160	27000	9500	B9.75/24	DB9.75/24	Own 6SRK	6-4⅝x5½	Own FK	U 5	No	Own FH	2D	H	8.5	85.0	13x3x¼	P
64		FBS	5–7	7900	136	160	27000	9500	B9.75/24	DB9.75/24	Own 6RB	6-5x5¾	Own FH	U 5	No	Own FH	2D	H	8.5	85.0	13x3x¼	P
65		FBRS	7–9	8300	136	160	32000	10500	B10.50/24	DB10.50/24	Own 6RB	6-5x5¾	Own FH	U 5	No	Own FHR	2D	H	8.5	85.0	13x3x¼	P
66	White (12)	60K	1¼–1½	1850	112	112	.....	3905	B7 00/20	B7 00/20	Own 2A	6-3½x4½	Own 3BC	U 3	No	Own 4C	S½	H	5.87	22.2	5x3x⅛	C
67		60I	1¼–1½	1850	138	157	.....	4210	B7.50/20	B7.50/20	Own 2A	6-3½x4½	Own 5B	U 4	No	Own 4C	S½	H	4.73	19.5	6x2⅝x⅜	C
68		161	1¼–1½	1700	138	157	.....	4420	B7.50/20	B7.50/20	Own GRCB	4-4x5¾	Own 8B	U 4	No	Own 4C	S½	H	4.73	19.5	6x2⅝x⅜	C
69		602	1½–2	2050	138	157	.....	4500	B7.00/20	DB7.00/20	Own 2A	6-3½x4½	Own 5B	U 4	No	Own 4CB	S½	H	4.73	19.5	6x2⅝x⅜	C
70		162	1½–2	1900	138	157	.....	4710	B7 00/20	DB7.00/20	Own GRCB	4-4x5¾	Own 8B	U 4	No	Own 4CB	S½	H	4.73	19.5	6x2⅝x⅜	C
71		611	2–2½	2450	148	196	.....	4960	B7.00/20	DB7.00/20	Own 4A	6-3¾x4½	Own 5B	U 4	No	Own 7C	S½	H	5.67	23.4	6⅝x3⅛x1¼	C
72		211	2–2½	2300	148	198	.....	5170	B7.00/20	DB7.00/20	Own GRCB	4-4x5¾	Own 8B	U 4	No	Own 7C	S½	H	5.67	23.4	6⅝x3⅛x1¼	C
73		56	2–2½	3125	165	175	.....	5276	S36x4	S36x7	Own GRC	4-4x5¾	OwnGRBB	U 4	No	Own 3C	S½	H	6.33	26.2	7x3x¼	C
74		612	2½–3	2800	148	196	.....	5295	B7.50/20	DB7.50/20	Own 4A	6-3¾x4½	Own 5B	U 4	No	Own 7CB	S½	H	5.67	23.4	6⅝x3⅛x1¼	C
75		212	2½–3	2650	148	198	.....	5500	B7.50/20	DB7.50/20	Own GRCB	4-4x5¾	Own 8B	U 4	No	Own 7CB	S½	H	5.67	23.4	6⅝x3⅛x1¼	C
76		620	2½–3	4350	157	195	.....	7420	B8.25/20	DB8.25/20	Own 3AD	6-4x5¼	Own 4B	U 4	No	Own 14C	SF	R	6.38	41.8	7½x2⅜x⅜	C
77		51A	2½–4	3750	170	190	.....	6438	S36x5°	S36x8°	Own GRB	4-4¼x5¾	OwnGRBA	U 4	No	Own 51A	S½	R	7.14	35.6	8x3x¼	C
78		618	3–4	3600	166	206	.....	6675	B9.00/20	DB9.00/20	Own 4AB	6-3¾x4	Own 11BA	U 5	No	Own 14CB	2F	R	8.15	61.8	8x3⅜x¼	C
79		621	3–4	4650	157	195	.....	7945	B9.00/20	DB9.00/20	Own 3AD	6-4x5¼	Own 4B	U 4	No	Own 10C	SF	R	6.33	41.4	7⅛x2⅛x⅜	C
80		630	3–4½	5000	168	215	.....	8500	B9.00/20	DB9.00/20	Own 3AD	6-4x5¼	Own 4B	U 4	No	Own 10C	SF	R	6.33	41.4	8x3x¼	C
81		640	3–4½	6100	180	214	.....	9200	B9.00/20	DB9.00/20	Own 1AB	6-4⅜x5⅝	Own 7B	U 4	No	Own 10C	SF	R	5.18	33.9	8¼x3⅛x⅜	C
82		58	3–5	4400	180	195	.....	7797	S36x5°	DS36x5°	Own GRB	4-4¼x5¾	Own 4B	U 4	No	Own 2C	2F	R	7.6	49.7	8¼x3⅛x⅜	C
83		58-8S	7½	5300	196	196	.....	9300	B10.50/24	DB10.50/24	Own GRB	4-4¼x5¾	Own 4B	U 4	No	Own 6C	2F	R	11.8	77.5	10½x3x⅜	C
84		55	5	4650	174	215	.....	8737	S36x5°	DS40x5	Own GRB	4-4¼x5¾	OwnGRBA	U 4	No	Own 55	2F	R	10.1	66.1	8x18.4 lb.	C
85		631	3½–6	5750	168	215	.....	9000	B9.75/20	DB9.75/20	Own 3AD	6-4x5¼	Own 4B	U 4	No	Own 2C	2F	R	8.70	56.9	8x3x¼	C
86		641	3½–6	6450	180	214	.....	9700	B9.75/20	DB9.75/20	Own 1AB	6-4⅜x5¾	Own 7B	U 4	No	Own 2C	2F	R	7.16	46.9	8¼x3⅛x⅜	C
87		642	4–7½	6750	180	214	.....	10600	B9.75/24	DB9.75/24	Own 1AB	6-4⅜x5¾	Own 7B	U 4	No	Own 13C	2F	R	10.2	66.5	8¼x3⅛x⅜	C
88		52	5–7½	5100	174	215	.....	9409	S36x6°	S40x12	Own GRB	4-4¼x5¾	OwnGRBA	U 4	No	Own 52	2F	R	11.7	75.8	8x18.4 lb.	C
89		643	5–9	6950	180	214	.....	10900	B10.50/24	DB10.50/24	Own 1AB	6-4⅜x5¾	Own 7B	U 4	No	Own 13C	2F	R	10.2	66.5	8¼x3⅛x⅜	C
90		691	7–9	7250	29	29	.....	12200	B10.50/24	DB10.50/24	Own 5AD	6-4⅝x5¾	Own 10BB	U 5	No	Own 13CB	2F	R	10.2	63.4	8¼x3⅜x⅜	C
91	Willys Over. 6	C113	½	415	113	113	4000	1875	B5.00/19	B5.00/19	Own C113	6-3¼x3⅞	Own C113	U 3	No	Own C113	S½	H	4.6	12.4	5½x2¼x⅛	C
92		C131	1½	595	131	131	7600	2750	B5.50/20	P32x6	Own C131	6-3¼x3⅞	War T9	U 4	No	Cla B373B	SF	H	6.3	40.8	6x2¾x⅜	C
93		C157	1½	675	157	157	8300	3050	B6.00/20	DB6.00/20	Own C157	6-3¼x3⅞	War T9	U 4	No	Cla B373B	SF	H	6.3	40.8	7⅛x2¾x⅜	C
94	World	DA-60	1	1195	150	166	8500	3650	B6.00/20	DB6.00/20	Lyc WTG	6-3x4¾	WG T9	U 4	No	Tim 53200H	SF	H	6.38	40.8	6½x2¾x⅛	C
95		DB-60	1½	1545	150	166	10000	3900	B6.50/20	DB6.50/20	Lyc 4SL	6-3¼x4½	WG T9	U 4	No	Tim 53200H	SF	H	6.38	40.8	6½x2¾x⅛	T
96		DC-60	2	1845	150	164	12000	4450	B7.00/20	DB7.00/20	Lyc 4SL	6-3¼x4½	WG T9	U 4	No	Tim 54200H	SF	H	6.8	43.5	6x3x¼	T
97		DA-88	2	2300	151	167	12000	4720	B7.50/20	DB7.50/20	Lyc GU	8-3x4¾	Fu MLU	U 4	No	Tim 54200H	SF	H	6.8	44.2	6x3x¼	T
98		DB-88	2½	2595	164	178	13500	5040	B8.25/20	DB8.25/20	Lyc GU	8-3x4¾	Fu MLU	U 4	No	Tim 56200H	SF	R	7.4	48.1	7x3x¼	T
99		DC-88	3	3295	164	182	15000	5400	P34x7	DP34x7	Lyc HD	8-3¼x4½	Fu MGU	U 4	No	Tim 56200H	SF	R	7.4	48.1	7x3x¼	T
100		DA-115	4	3595	168	182	17500	6100	P36x8	DP36x8	Lyc HD	8-3¼x4½	Fu MGU	U 4	No	Tim 58200H	SF	R	7.8	50.7	8x3x¼	T
101		DB-115	5	3895	165	191	20000	6550	P36x8	DP36x8	Lyc HD	8-3¼x4½	Fu MGU	U 4	No	Tim 65706D	WF	R	8.5	55.2	8x3x¼	T
	Six-Wheelers																					
102	Autocar	6GE	15	11000	198	234	.....	16300	B9.75/22	DB9.75/22	Ste LT	6-5¼x6	BL 734	U 4	A 3	Tim SW410	WF	R	8.2	99.6	10½x3x⅛	T
103	Chicago	1-56-D	4 10	6000	198	222	39000	12740	B9.75/20	DB9.75/20	Wau 6SRL	6-4⅜x5½	BL 60	A 7	No	Tim 300W	WF	R	7.75	73.6	8x3½x⅜	T
104	Corbitt	20SW6	4R 3-5	5720	Op	Op	22000	9000	B7.50/20	DB7.50/20	Con 20R	6-4⅛x4¾	BL 615	U 5	No	TimSW100W	WF	H	Opt	Opt	8x3½x¼	C
105		28SW6	4R 5–7½	6380	Op	Op	30000	10000	P34x7	DP34x7	Con 21R	6-4⅜x4¾	BL 607	A 7	No	TimSW200W	WF	H	Opt	Opt	8x3x⅜	C
106		36SW6	4R 7½–10	8800	Op	Op	38000	11500	B36x8	DP36x8	Con 21R	6-4⅜x4¾	BL 607	A 7	No	TimSW310W	WF	R	Opt	Opt	10½x3½x⅜	C
107		40SW6	4R 10–15	11000	Op	Op	43000	13000	P38x9	DP38x9	Con 16H	6-4⅜x5¾	BL 707	A 7	No	TimSW410W	WF	R	Opt	Opt	10½x3½x⅜	T
108	Day Elder	285	4R 8	5295	164	232	28500	12000	B8.25/20	DB8.25/20	Con 21R	6-4⅜x4¾	BL 538	A 5	No	TimSwD210h	WF	R	7.5	71.2	10x3¾x⅜	C
109		345	4R 10	6395	164	232	34500	12500	B9.00/20	DB9.00/20	Con 21R	6-4⅜x4¾	BL 748	A 7	No	TimSwd310w	WF	R	8.5	79.9	10x3¾x⅜	C
110		402	4R 12	7495	164	232	40200	14200	B9.75/20	DB9.75/20	Con 16H	6-4¾x5¾	BL 748	A 7	No	TimSwd410w	WF	R	9.0	84.6	10x3¾x⅜	C
111	Diamond T	801	4R 4	4140	189	219	21000	8500	P36x8	DP36x8	Her YXC	6-4⅜x4¾	BL 55	A 7	No	Own	WF	R	Opt	Opt	6½x3x¼	C
112		1201	4R 6	5600	180	210	28000	11000	P34x7	DP34x7	Her RXB	6-4⅜x5¼	BL 60	A 7	No	Tim SW200	WF	R	Opt	Opt	9x3¼x¼	P
113		1602	4R 8	6400	175	210	36000	11700	P36x8	DP36x8	Her RXC	6-4⅜x5¼	BL 60	A 7	No	Tim SW310	WF	R	Opt	Opt	9x3¼x¼	P
114		1603	4R 8	7500	184	224	36000	12500	P36x8	DP36x8	Wau 6RB	6-5x5¾	BL 70	A 7	No	Tim SW310	WF	R	Opt	Opt	9x3½x¼	P
115	Dodge Bros.	UGS50	1½–3	875	153	153	12000	3575	B6.00/20	P32x6	Own	4-3⅝x4¾	Own	U 4	No	Own	SF	H	5.85	36.1	7⅛x2¾x⅛	C
116		GS50	1½–3	935	153	153	12000	3650	B6.00/20	P32x6	Own	6-3¼x4¼	Own	U 4	No	Own	SF	H	5.85	36.1	7⅛x2¾x⅛	C
117		GS55	2–4	1260	158	158	14575	4450	B7.00/20	DB7.00/20	Own	6-3¼x4⅜	Own	U 5	No	Own	SF	H	6.37	50.9	8½x2⅛x⅛	C
118	Douglas	F66	4R 5	7900	210	Op	36000	10000	P36x8	DP36x8	Bud GL6	6-4½x6	Fu HOG	U 8	A 8	Wis 8017	WF	R	7.75	72.7	10x2¾x⅜	T
119	Federal	D2SW	2R 3	1050	140	182	13750	3925	B6.00/20	P32x6	Con W10	4-3⅞x4¼	WG T9	U 4	No	Cla B373A	SF	H	6.38	40.8	6x2¾x¼	C
120	(cont'd)	E2SW	2R 3	1150	145	187	13750	3975	B6.00/20	P32x6	Con 17E	6-3⅜x4	WG T9	U 4	No	Cla B373A	SF	H	6.38	40.8	6x2¾x¼	C

Line Number	ENGINE DETAILS								MAIN BEARINGS		Oiling System Type	Governor Make	FUEL SYST.		ELECTRICAL		Clutch Type and Make	Radiator Make	Universals Make	FRONT AXLE	Steering Gear Make	BRAKES: SERVICE			BRAKES	BODY MOUNTING DATA			SPRINGS		
	Piston Displacement	Compression Ratio	Torque lb. ft.	N.A.C.C. Rated H.P.	Max. Brake H.P. at R.P.M. Given	Valve Arrangement	Camshaft Drive	Piston Material	Number and Diameter	Length			Carburetors Make	Fuel Feed	Ignition System Make	Generator, Starter Make				Make and Model		Make, Location Type Operation	Lining Area	Drum Material	Hand Type, Location	Cab to Rear of Frame	Cab to Rear Axle	Width of Frame	Front	Rear	Auxiliary Type
1	268	4.9	175	27.3	75-2800	L	C	A	7-2 1/16	12	CC	No	Zen	M	DR	DR	P.Lo	Ow	Cle	Own	Ros	L4IH	289	C	TX	105¼	60½	34	40x2¼	52x2½	
2	358	4.9	230	36.4	110-2800	L	G	A	9-2⅝	12	FP	EV	Sch	M	DR	DR	dp.Lo	Mc	Cle	Own	Ros	L4IHV	390	a	FD	143	83	34	44x3	56x3½	½
3	248	5.1	150	27.3	65-2600	L	G	C	7-2⅝	10⅜	FP	No	Zen	G	DR	DR	P.BB	Yo	Spi	Tim	Ros	L4IH	380	G	TX	129½	Opt	31½	40x2½	50x3	½
4	298	4.7	192	33.7	66-2200	L	G	C	7-2⅝	13¼	PC	No	Zen	G	AL	AL	D.BB	Yo	Spi	Tim	Ros	L4IHV	452	G	TX	129½	Opt	31½	40x2½	50x3	½
5	339	4.7	225	38.4	73-2200	L	G	C	7-2⅝	13¼	PC	Mo	Zen	G	AL	AL	D.Fu	Yo	Spi	Tim	Ros	L4IHV	578	G	TX	106	Opt	31½	40x2½	50x3	½
6	339	4.7	225	38.4	73-2200	L	G	C	7-2⅝	13¼	PC	Mo	Zen	G	AL	AL	D.Fu	Yo	Spi	Tim	Ros	L4IHV	658	G	TX	106	Opt	31½	40x2½	50x3	½
7	339	4.7	225	38.4	73-2200	L	G	C	7-2⅝	13¼	PC	Mo	Zen	G	AL	AL	D.Fu	Yo	Spi	Tim	Ros	L4IHV	658	G	TX	106	Opt	31½	40x2½	50x3	½
8	360	4.7	238	40.3	80-2200	L	G	C	7-2⅝	13¼	PC	Mo	Zen	G	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IHV	768	H	TD	106	Opt	31½	40x2½	50x3	½
9	428	4.4	280	45.9	93-2200	L	G	C	7-3	15	PC	Mo	Zen	G	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IH	768	H	TD	106	Opt	31½	40x2½	50x3	½
10	428	4.4	280	45.9	93-2200	L	G	C	7-3	15	PC	Mo	Zen	G	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IHV	893	G	TD	106	Opt	31½	40x2½	50x3	½
11	529	4.9	355	51.2	115-2200	L	G	C	7-3	15	PC	Mo	Zen	G	AL	AL	D.Fu	Yo	Spi	Shu	Own	Ws4IA	847	G	TD	118	Opt	31½	42x3	60x3½	½
12	478	4.4	318	51.2	103-2200	L	G	C	7-3	15	PC	Mo	Zen	G	AL	AL	D.Fu	Yo	Spi	Tim	Ros	L4IH	768	G	TD	91¾	Opt	31½	40x2½	50x3	½
13	478	4.4	318	51.2	103-2200	L	G	C	7-3	15	PC	Mo	Zen	G	AL	AL	D.Fu	Yo	Spi	Tim	Ros	L4IH	893	H	TD	92 1/16	Opt	31½	40x2½	50x3	½
14	214	5.0	137	18.0	72-3300	L	C	A	4-2⅜	6⅜	CC	....	Zen	M	AL	AL	P.Lo	Pe	Spi	Tim	Ros	L4IH	269	P	TX	96	57	34	38x2½	50x2½	N
15	214	5.0	137	28.0	72-3300	L	C	A	4-2⅜	6⅜	CC	....	Zen	M	DR	DR	P.Lo	Pe	Spi	Tim	Ros	L4IH	269	P	TX	96	57	34	38x2¼	50x2½	N
16	248	5.0	160	28.0	70-3000	L	C	C	7-2⅜	9 1/16	CC	....	Zen	M	DR	DR	P.BB	Pe	Spi	Tim	Ros	L4IH	269	P	TX	120	76	34	42x2½	54x2½	½
17	214	5.0	137	28.0	72-3300	L	C	A	4-2⅜	6⅜	CC	....	Zen	M	DR	DR	P.Lo	Pe	Spi	Tim	Ros	L4IH	269	P	TX	96	57	34	38x2¼	50x2½	½
18	248	5.0	160	28.0	70-3000	L	C	C	7-2⅜	9 1/16	CC	....	Zen	M	DR	DR	D.BL	Pe	Spi	Tim	Ros	L4IHV	282	a	TX	120	76	34	42x2½	54x3	½
19	315	4.6	200	33.7	72-2500	L	G	C	7-2⅝	12½	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ros	L4IHV	330	a	TX	144	91	34	42x2½	54x3	½
20	255	5.0	175	28.0	68-2600	L	G	C	4-2⅜	7⅝	CC	....	Zen	M	DR	DR	P.Lo	Pe	Spi	Tim	Ros	L4IH	282	P	TX	96	57	34	38x2¼	50x2½	½
21	358	4.4	230	38.4	80-2500	L	G	C	7-2⅝	12½	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ros	L4IH	330	a	CX	144	91	34	42x2½	54x3	½
22	315	4.6	200	33.7	72-2500	L	G	C	7-2⅝	12½	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ha	L4IHV	392	a	TX	144	91	34	42x2½	54x3	½
23	358	4.4	230	38.4	80-2500	L	G	C	7-2⅝	12½	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ha	L4IHV	396	a	CX	144	91	34	42x2½	54x3	½
24	358	4.4	230	38.4	80-2500	L	G	C	7-2⅝	12½	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ha	L4IH	392	a	CX	144	91	34	42x2½	54x3	½
25	381	4.4	240	40.8	85-2500	L	G	C	7-2⅝	12½	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ha	O2IMV	466	s	JX	144	91	34	42x2½	54x3	½
26	381	4.4	240	40.8	85-2500	L	G	C	7-2⅝	12½	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ha	L4IH	397	a	CX	144	91	34	42x2½	54x3	½
27	381	4.4	240	40.8	85-2500	L	G	C	7-2⅝	12½	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ros	L4IHV	664	a	CX	172	108	34	48x3	54x3	½
28	462	4.5	300	45.9	102-2400	L	G	C	7-3	13⅞	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ros	L4IHV	664	a	CX	172	108	34	48x3	54x3	½
29	381	4.4	240	40.8	85-2500	L	G	C	7-2⅝	12½	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ros	O2IMV	576	a	JX	172	108	34	48x3	54x3	½
30	411	4.6	260	40.8	91-2400	L	G	A	7-3	13⅞	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ros	O2IMV	562	s	JX	172	108	34	48x3	54x3	½
31	462	4.5	300	45.9	102-2400	L	G	C	7-3	13⅞	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ros	L4IHV	664	a	CX	172	108	34	48x3	54x3	½
32	462	4.5	300	45.9	102-2400	L	G	C	7-3	13⅞	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ros	O2IMV	576	a	JX	172	108	34	48x3	54x3	½
33	381	4.4	240	40.8	85-2500	L	G	C	7-2⅝	12½	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ros	O2IMV	500	a	JX	172	108	34	48x3	54x3	½
34	462	4.5	300	45.9	102-2400	L	G	C	7-3	13⅞	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ros	O2IMV	658	s	JX	172	108	34	48x3	54x3	½
35	462	4.5	300	45.9	102-2400	L	G	C	7-3	13⅞	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ros	Ws4IA	690	a	CX	172	108	34	48x3	60x4	½
36	462	4.5	300	45.9	102-2400	L	G	C	7-3	13⅞	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ros	O2IMV	500	s	JX	172	108	34	48x3	54x3	½
37	489	4.5	295	43.4	90-2000	L	G	C	4-3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ros	O2IMV	666	s	JX	168	107	34	48x3	54x3	½
38	549	4.5	330	48.6	99-2000	L	G	C	4-3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ros	O2IMV	666	s	JX	168	107	34	48x3	54x3	½
39	549	4.5	330	48.6	99-2000	L	G	C	4-3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ros	Ws4IA	690	a	CX	163	107	34	48x3	60x4	½
40	677	4.4	440	60.0	125-2000	L	G	A	4-3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Own	Mo	Spi	Tim	Ros	O2IMV	666	s	JX	168	107	34	48x3	54x3	½
41	199	4.8	136	22.5	50-2600	L	G	C	3-2⅛	7¼	PC	No	Str	P	DR	DR	P.BB	Fe	Spi	Sal	Ros	B4IM	257	E	TX	90⅞	50 11/16	32⅛	38x2¼	50x2½	N
42	201	5.5	141	21.0	60-2600	L	G	C	4-2⅜	7	PC	No	Str	P	DR	DR	P.Lo	Pe	Spi	Sal	Ros	B4IM	257	E	TX	90⅞	50 11/16	32⅛	38x2½	54x2½	N
43	224	4.8	142	25.3	62-2800	L	G	C	4-2⅜	8¼	PC	No	Zen	P	DR	DR	P.BB	Fe	Spi	Sal	Ros	B4IM	257	E	TX	92	51⅜	32⅛	38x2½	50x2½	N
44	224	4.8	142	25.3	62-2800	L	G	C	4-2⅜	8¼	PC	No	Zen	P	DR	DR	P.BB	Fe	Spi	Sal	Ros	B4IM	257	E	TX	103⅜	62¾	32⅛	38½x2¼	50x2½	½
45	242	5.	162	27.3	65-2800	L	G	C	4-2⅜	8¼	PC	No	Zen	P	DR	DR	P.BB	Fe	Spi	Sal	Ros	B4IM	257	E	TX	103¼	62⅝	32⅛	38½x2¼	50x2½	½
46	242	5.0	162	27.3	65-2800	L	G	C	4-2⅜	9½	CC	No	Zen	P	DR	DR	P.BB	Fe	Spi	Sal	Ros	B4IM	257	E	TF	103¼	62⅝	32⅛	38½x2¼	50x2½	½
47	299	5.0	193	33.8	85-2750	L	G	C	4-2⅝	9 1/16	FP	Mo	Str	P	DR	DR	D.Fu	Fe	Spi	Cla	Ros	B4IM	308	E	TX	104⅝	58⅝	32⅛	38x2¼	50x3	½
48	299	5.0	193	33.8	85-2750	L	G	C	4-2⅝	9 1/16	FP	Mo	Str	P	DR	DR	D.Fu	Fe	Spi	Cla	Ros	B4IM	348	E	TX	127⅞	79 1/16	32⅛	38x2¼	50x3	½
49	354	4.6	224	36.2	90-2750	L	G	C	4-2¾	10	FP	Mo	Str	P	DR	DR	D.Fu	Fe	Spi	Tim	Ros	B4IM	453	E	TX	129¾	79 11/16	32¼	40x3	56x3	½
50	322	5.2	225	36.5	100-2800	L	G	C	5-2⅜	11	CC	Mo	Str	P	DR	DR	D.Fu	Fe	Spi	Cla	Ros	B4IM	348	E	TF	126¾	79 11/16	32¼	40x3	50x3	½
51	420	5.2	300	44.4	130-2800	L	G	C	5-2¾	12¾	FP	No	Str	P	DR	DR	P.BL	Fe	Spi	Cla	Ros	B4IMV	348	E	TX	128⅛	75 1/16	32¼	40x3	56x3	½
52	354	4.6	224	36.2	90-2750	L	G	C	4-2¾	10	PS	Mo	Str	P	DR	DR	D.Fu	Fe	Spi	Eat	Ros	B4IM	453	E	TX	126¾	76¼	32¼	40x3	56x3	½
53	462	4.6	300	45.9	100-2000	L	G	C	7-3	12⅞	FP	Mo	Str	P	DR	DR	D.BL	Fe	Spi	Eat	Ros	B4IMV	453	E	TX	128⅛	75⅝	32¼	40x3	56x3	½
54	420	5.2	300	44.4	130-2800	L	G	C	5-2¾	12¾	FP	No	Str	P	DR	DR	D.BL	Fe	Spi	Eat	Ros	B4IMV	453	E	TX	128⅛	75⅝	32¼	40x3	56x3	½
55	516	4.5	330	51.2	110-2000	L	G	C	7-3	12⅞	PS	Wa	Str	P	DR	DR	D.BL	Mo	Spi	Eat	Ros	B4IMV	565	E	TX	128 1/16	73 1/16	34	40x3	56x4	½
56	516	4.5	330	51.2	110-2000	L	G	C	7-3	12⅞	FP	Wa	Str	P	DR	DR	D.BL	Mo	Spi	Eat	Ros	Ws4IA	759	E	TX	128 1/16	73 1/16	34	40x3	56x4	½
57	230	4.6	154	25.4	75-3200	L	C	C	4-2⅛	8 11/16	CC	No	Str	M	DR	DR	P.Lo	Mc	Spi	Cla 208B	Ros	B4IM	231	P	4I	83¼	48¼	34	36x1¾	45x2½	N
58	230	4.6	154	25.4	75-3200	L	C	C	4-2⅛	8 11/16	CC	Ha	Str	M	DR	DR	DP.Lo	Mc	Cle	Tim 31010	Ros	B4IM	284	P	4I	97 1/16	60	34	39x2	56x3	N
59	230	4.6	154	25.4	75-3200	L	G	C	4-2⅛	8 11/16	CC	Ha	Str	M	DR	DR	DP.Lo	Mc	MM	Tim 31020	Ros	B4IMV	420	P	4I	97 1/16	60	34	39x2½	56x3	½
60	381	4.5	240	40.0	85-2200	L	G	C	7-2⅝	12⅜	FP	Ow	Zen	P	DR	DR	P.Ow	Ow	Own	Own FN	Ros	O4FXM	450	D	FM	126	84	34	48x3	48x3	½
61	462	4.5	300	46.0	100-1900	L	G	C	7-3	13⅞	FP	Ow	Zen	P	DR	DR	P.Ow	Ow	Own	Own FM	Ros	O4FXM	450	D	FM	126	84	34	48x4	48x4	½
62	462	4.5	300	46.0	100-1900	L	G	C	7-3	13⅞	PC	Ow	Zen	V	Sc	DR	P.Ow	Ow	Own	Own F	Ros	O4FXM	600	D	FX	108	78	36	52x4	52x4	½
63	517	4.5	330	51.0	110-1900	A	C	C	7-3	13⅞	PC	Ow	Zen	V	Sc	DR	P.Ow	Ow	Own	Own F	Ros	O4FXM	600	D	FX	126	96	36	52x4	52x4	½
64	677	4.5	440	60.0	130-1900	L	G	C	7-3½	10⅜	PC	Ow	Zen	P	Sc	DR	P.Ow	Ow	Own	Own F	Ros	O4FXM	600	D	FX	126	96	36	52x4	52x4	½
65	677	4.5	440	60.0	130-1900	L	G	C	7-3½	10⅜	PC	Ow	Zen	P	Sc	DR	P.Ow	Ow	Own	Own F	Ros	O4FXM	600	D	FX	126	96	36	52x4	52x5	½
66	260	4.8	150	29.4	54-2100	L	C	S	7-2⅝	10 11/16	FP	No	Zen	V	DR	LN	P.Ow	Ow	Spi	Own 4D	Ha	L4IH	276	a	TX	....	....	34½	39x2¼	50x2½	N
67	260	4.8	150	29.4	54-2100	L	C	S	7-2⅝	10 11/16	FP	No	Zen	V	DR	DR	P.Ow	Ow	MM	Own 4D	Ha	L4IH	276	a	TX	112	58¼	34½	39x2¼	50x2½	N
68	289	4.3	170	25.6	45-1800	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	DR	DR	P.Ow	Ow	MM	Own 4D	Ha	L4IH	276	a	TX	112	58¼	34⅝	39x2¼	50x2½	N
69	260	4.8	150	29.4	54-2100	L	C	S	7-2⅝	10 11/16	FP	No	Zen	V	DR	DR	P.Ow	Ow	MM	Own 4D	Ha	L4IH	276	a	TX	112	58¼	34½	39x2¼	50x2½	N
70	289	4.3	170	25.6	45-1800	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	DR	DR	P.Ow	Ow	MM	Own 4D	Ha	L4IH	276	a	TX	112	58¼	34⅝	39x2½	50x2½	N
71	299	4.8	190	33.7	70-2100	L	C	C	7-2⅝	10 11/16	FP	Ha	Zen	V	DR	DR	P.Ow	Ow	Spi	Own 7D	Ha	L4IH	343	a	TX	115 1/16	68 1/16	34⅝	41x2½	54x3	N
72	289	4.3	170	25.6	45-1800	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	DR	DR	P.Ow	Ow	Spi	Own 7D	Ha	L4IH	343	a	TX	115 1/16	68 1/16	34⅝	41x2½	54x3	N
73	289	4.3	170	25.6	45-1800	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	Ei	ns	P.Ow	Ow	Spi	Own 3D	Ow	O2IM	268	a	CI	119⅜	81⅜	36	41½x2½	47½x3	N
74	299	4.8	190	33.7	70-2100	L	C	C	7-2⅝	10 11/16	FP	Ha	Zen	V	DR	DR	P.Ow	Ow	Spi	Own 7D	Ha	L4IH	343	a	CX	115 1/16	68 1/16	34⅝	41x2½	54x3	N
75	289	4.3	170	25.6	45-1800	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	DR	DR	P.Ow	Ow	Spi	Own 7D	Ha	L4IH	343	a	TX	115¾	68 1/16	34⅝	41x2½	54x3	N
76	396	4.9	250	38.4	100-2100	H	C	S	7-2¾	13⅛	FP	Ow	Zen	M	DR	DR	P.Ow	Ow	Spi	Own 11D	Ros	LO4IHV	414	a	CI	107½	67½	34	41x2½	54x3	N
77	326	4.3	207	28.9	54-1600	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	Ei	ns	P.Ow	Ow	Spi	Own 51A	Ow	O2IM	335	a	CX	146	84¾	34	40½x2½	54⅜x3	N
78	299	5.5	202	33.7	77-2400	L	C	S	7-2⅝	10 11/16	FP	Ha	Zen	V	DR	DR	P.Ow	Ow	Spi	Own 11DC	Ros	LO4IHV	414	a	2I	140 11/16	84 11/16	34	41x2½	54x3	N
79	396	4.9	250	38.4	100-2100	H	C	S	7-2¾	13⅛	FP	Ow	Zen	M	DR	DR	P.Ow	Ow	Spi	Own 11D	Ros	LO4IHV	484	a	CI	107½	67½	34	41x2½	54x3½	N
80	396	4.9	250	38.4	100-2100	H	C	S	7-2¾	13⅛	FP	Ow	Zen	M	DR	DR	P.Ow	Ow	Spi	Own 6D	Ros	O4IHV	553	a	CI	144⅞	84⅞	34 1/16	42x3	56x3½	½
81	519	4.0	333	45.9	118-2100	H	C	S	7-3	15 11/32	FP	Ow	Zen	E	LN	LN	dp.Ow	Ow	Spi	Own 6D	Ros	O4IA	553	a	CI	156¾	91¾	34 1/16	42x3	56x3½	½
82	326	4.3	207	28.9	54-1600	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	Ei	ns	P.Ow	Ow	Spi	Own 2D	Own	OPXM	224	a	2I	148½	93½	34⅛	40½x3	56x3½	½
83	326	4.3	207	28.9	54-1800	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	LN	LN	P.Ow	Ow	Spi	Own 9D	Ros	OPXM	224	a	2I	176	120	38½	42x3	57x5	N
84	326	4.3	207	28.9	54-1600	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	Ei	ns	P.Ow	Ow	Spi	Own 55	Own	OPXM	224	a	2I	167⅝	107⅛	42½	44x3	51⅞x5	N
85	396	4.9	250	38.4	100-2100	H	C	S	7-2¾	13⅛	FP	Ow	Zen	M	DR	DR	P.Ow	Ow	Spi	Own 9D	Ros	O4IA	595	a	CI	144⅞	84⅞	34 1/16	42x3	56x3½	½
86	519	4.0	333	45.9	118-2100	H	C	S	7-3	15 11/32	FP	Ow	Zen	E	LN	LN	dp.Ow	Ow	Spi	Own 9D	Ros	O4IA	595	a	CI	156¾	91¾	34 1/16	42x3	56x3½	½
87	519	4.0	333	45.9	118-2100	H	C	S	7-3	15 11/32	FP	Ow	Zen	E	LN	LN	dp.Ow	Ow	Spi	Own 9D	Ros	O4IA	623	a	CI	156¾	91¾	34 1/16	42x3	51⅞x5	N
88	326	4.3	207	28.9	54-1800	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	Ei	ns	P.Ow	Ow	Spi	Own 52	Ow	OPXM	224	a	2I	167⅝	107⅛	42½	44x3	51⅞x5	N
89	519	4.0	333	45.9	118-2100	H	C	S	7-3	15 11/32	FP	Ow	Zen	E	LN	LN	dp.Ow	Ow	Spi	Own 9D	Ros	O4IA	623	a	CI	156¾	91¾	34 1/16	42x3	51⅞x5	N
90	580	4.6	385	51.3	130-2300	H	C	S	7-3	15 11/32	FP	Ow	Zen	M	DR	LN	P.Ow	Ow	Spi	Own 5D	Ros	O4IA	623	a	TD	100	65	36	41x3	55⅝x5	N
91	193	5.2	135	25.3	65-3400	L	C	C	4-2⅜	6 21/32	CC	No	Ti	M	AL	AL	P.Ow	Fe	Spi	Own C113	Own	B4IM	143	P	4I	54 1/16	27¾	43¼	36½x1¾	51x1¾	N
92	193	5.2	135	25.3	65-3400	L	C	C	4-2⅜	6 21/32	CC	No	Ti	M	AL	AL	P.Ow	Fe	Spi	Own C131	Own	B4IM	235	a	4I	86¾	51⅞	37	36x1¾	45x2½	N
93	193	5.2	135	25.3	65-3400	L	C	C	4-2⅜	6 21/32	CC	No	Ti	M	AL	AL	P.Ow	Fe	Spi	Own C157	Own	B4IM	235	a	4I	121 11/16	77 11/16	37	36x1¾	45x2½	N
94	201	5.5	142	21.6	63-2900	L	G	C	4-2⅜	7	CC	No	Zen	V	AL	AL	dp.Lo	Pe	Spi	Tim 30000H	Ros	L4IH	268	p	TX	126	70	34	38x2½	54x2½	N
95	224	4.7	145	25.3	61-2750	L	G	C	4-2⅜	7 11/16	PC	No	Zen	V	AL	AL	dp.Lo	Pe	Spi	Tim 30000H	Ros	L4IH	268	p	TX	126	70	34	38x2½	54x2½	N
96	224	4.7	145	25.3	61-2750	L	G	C	4-2⅜	7 11/16	PC	No	Zen	V	AL	AL	dp.Lo	Pe	Blo	Shu 5427	Ros	L4IH	306	E	TX	126	70	34	38x2½	54x2½	½
97	268	5.3	184	28.8	96-3400	L	C	C	5-2⅜	8⅝	CC	Ha	Zen	M	AL	AL	dp.Lo	Pe	Blo	Shu 5427	Ros	L4IH	306	E	TD	126	71	34	38x2½	54x2½	½
98	268	5.3	184	28.8	96-3400	L	C	C	5-2⅜	8⅝	CC	Ha	Zen	M	AL	AL	dp.Lo	Mo	Blo	Shu 5432	Ros	L4IHV	354	E	TD	Opt	88	34	38x2½	54x2½	½
99	298	5.2	205	33.8	115-3300	L	C	C	5-2⅜	10	PC	Ha	Zen	M	AL	AL	dp.Lo	Mo	Spi	Shu 5432	Ros	L4IHV	354	E	TD	Opt	88	34	38x2½	54x2½	½
100	298	5.2	205	33.8	115-3300	L	C	C	5-2⅜	10	PC	Ha	Zen	M	AL	AL	dp.Lo	Mo	Spi	Shu 5572	Ros	L4IHV	397	E	TD	Opt	88	33½	42x3	56x3	½
101	298	5.2	205	33.8	115-3300	L	C	C	5-2⅜	10	PC	Ha	Zen	M	AL	AL	dp.Lo	Mo	Spi	Shu 5572	Ros	L4IHV	643	E	TD	Opt	85	33½	42x3	56x3	½
102	780	4.7	475	66.1	156-1800	L	G	A	7-3	16⅛	FP	St	Ze2	M	NE	LN	dp.BL	GO	Spi	Tim 27450	Ros	Ws6IA	720	a	FD	181½	101½	34¼	42½x3	61x5	½
103	462	4.5	300	45.9	102-2400	L	G	C	7-3	13⅞	FP	Wa	Str	M	AL	AL	D.BL	Ch	Spi	Tim 26450	Ros	TWsRIA	536	a	TD	Opt	107 1/16	35½	44½x3	60x4	N
104	411	4.2	236	40.0	89-2400	H	C	C	7-2¾	13	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35100tw	Ros	Ws6IA	459	a	TD	Opt	Opt	34	40x2½	56x4	½
105	427	4.2	268	45.9	100-2600	H	C	C	7-2¾	13	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 26450W	Ros	Ws6IA	525	a	TD	Opt	Opt	34	46x3	56x4	½
106	427	4.2	268	45.9	100-2600	H	C	C	7-2¾	13	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 27450W	Ros	Ws6IA	536	a	TD	Opt	Opt	34	46x3	66x4	½
107	611	4.5	384	54.1	127-2300	L	G	A	7-3	13 11/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 27450W	Ros	Ws6IA	720	a	TD	Opt	Opt	34	46x3	66x4	½
108	427	4.2	267	45.9	100-2600	H	C	N	7-2¾	13 1/16	FP	Ha	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 26450	Ros	L6IHV	842	a	TX	132	80	33	48x3	64x4	½
109	427	4.2	267	45.9	100-2600	H	C	N	7-2¾	13 1/16	FP	Ha	Zen	M	DR	DR	dp.BL	Pe	Blo	Tim 26450	Ros	TrIA	1014	a	TX	132	80	33	48x3	64x5	½
110	611	4.5	396	54.2	120-2000	L	G	A	7-3	13 11/16	FP	Ha	Zen	M	DR	DR	dp.BL	Pe	Blo	Tim 26450	Ros	TrIA	1014	a	TX	126¼	74¼	33	45½x3	64x5	½
111	428	4.4	280	45.	93-2200	L	G	C	7-3	14	PC	Ha	Zen	M	AL	AL	D.Co	GO	SpP	Shu 5582B	Ros	L6IHV	571	a	TD	162	103	34	45¼x2½	58x4	N
112	501	4.4	330	48.6	111-2200	L	G	C	7-3	12½	PC	Ha	Zen	M	AL	AL	D.Co	GO	SpB	Shu 678	Ros	Ws4IA	238	a	TD	162	100¼	37	46x3	50x4	N
113	529	4.4	350	51.3	114-2200	L	G	C	7-3	12½	PC	Ha	Zen	M	AL	AL	D.Co	GO	SpB	Shu 678	Ros	Ws4IA	238	a	TD	138¾	94¾	37	46x3	50x4	N
114	677	...	418	60.0	127-2000	L	G	C	4-3½	11⅜	PC	Wa	Zen	M	LN	LN	D.BL	GO	SpB	Shu 678	Ros	Ws4IA	238	a	TD	141	93	37	46x3	50x4	N
115	196	4.6	124	21.0	48-2800	L	G	A	3-2¼	6⅛	CC	No	Car	M	DR	DR	P BB	Fe	Own	Own	Own	O4IH	175	a	TX	117½	70	34¼	36x1¾	43⅜x3	N
116	211	5.3	134	25.3	60-3100	L	C	S	4-2¼	6¼	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	175	a	TX	117½	80½	34½	36x1¾	43⅜x3	N
117	217	5.8	144	25.3	75-3200	L	C	S	4-2¼	6¼	CC	Ha	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	365	a	TX	145	70	38 1/16	39x2	43⅜x3	N
118	572	4.3	358	48.6	114-1900	L	G	C	4-3	10 1/16	PC	Bu	Zen	E	LN	LN	D.Fu	On	Blo	Shu 615	Ros	WrIMV	960	a	CX	240	140	36	48x3	65x3½	N
119	200	4.7	126	24.0	48-2500	L	C	A	3-2⅛	5⅞	CC	Mo	Zen	M	DR	DR	P.BB	Lo	Cle	Cla F212	Ge	L6IH	312	P	TX	123	64¼	34	38x2¼	40½x2½	N
120	215	5.1	137	27.3	60-2600	L	C	A	7-2⅛	9 11/16	CC	Mo	Zen	M	DR	DR	P.BB	Lo	Cle	Cla F212	Ge	L6IH	312	P	TX	118	63¾	34	38x2¼	40½x2½	N

Line Number	MAKE AND MODEL	Wheels Driven—4-Wheelers	GENERAL (See Keynote)						TIRE SIZE		MAJOR UNITS									FRAME	
											ENGINE		TRANSMISSION			REAR AXLE			GEAR RATIOS		
			Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight	Chassis Wt. (Stripped)	Front	Rear	Make and Model	No. of Cylinders Bore and Stroke	Make and Model	Location and Forward Speeds	Aux. Location and Speeds	Make and Model	Gear and Type	Drive and Torque	In High	In Low	Side Rail Dimensions	Type
1	Federal...D2D	4R	3	1350	140	182	14000	4235	B6.00/20	P32x6	Con W10	4–3¼x4¼	WG T9	U 4	No	Cla B373A	BF	H	6.38	40.8	6x2¾x¼	C
2	(conc'd)..E2D	4R	3	1450	145	187	14000	4310	B6.00/20	P32x6	Con 17E	6–3¾x4	WG T9	U 4	No	Cla B373A	BF	H	6.38	40.8	6x2¾x¼	C
3	.....A68W	2R	4	1925	164	182	18500	6050	P32x6	DP32x6	Con 16C	6–3¾x4⅝	Own 7776	A 4	No	Cla B610A	BF	H	6.38	38.5	6x3¼x¼	C
4	....A600SW	2R	4½–5	2395	170	206	20000	7300	B7.50/20	DB7.50/20	Con E601	6–3⅞x4½	Own 7784	A 4	No	Cla B642	BF	H	7.16	46.7	6x3½x¼	C
5	.....A600D	4R	4½–5	2795	170	206	20000	7700	B7.50/20	DB7.50/20	Con E601	6–3⅞x4½	Own 7784	A 4	No	Cla B642	BF	H	7.16	46.7	6x3½x¼	C
6	.....T10SW	2R	7	3895	188	224	28000	9600	7.34x7	DP34x7	Con 18	6–4x4½	BL 607	A 7	No	Tim 58200H	BF	H	7.8	74.1	7½x3½x¼	C
7	FWD.....MX6	Op	10–15	[illegible]	170	200	48000	15000	P40x10	DP40x10	Wa.. RB	6–5x5¾	BL 714	U 4	A 2	Wis 131TW	2F	H	8.36	173.	10x3x¼	C
8	.....X6	4F	6–10	7385	170	Op	36000	12650	B9.00/20	DB9.00/20	Wau 8RK	6–4⅝x5½	Own U	A 5	Op	Own X	BF	H	7.35	73	7x3x¼	C
9	(6)Gen.Mo.T90	4R	5–7½	4675	185	220	28000	9520	B7.50/20	DB7.50/20	Own 400	6–4½x5	Own	U 5	Op	Own	WF	R	9.25	76.0	9½x3½x¼	TL
10	.....T95	4R	7–11	7695	189	224	40000	13250	P34x7	DP34x7	Own 525	6–4½x7½	Own	U 4	Op	Own	WF	R	8.50	53.3	9½x4x¼	L
11	G-P.....75-6SW	4R	6–8	5440	174	Op	39000	9500	B9.75/20	B11.25/20	Wau 8RL	6–4½x5½	Fu VUOG	U 5	No	Tim SW200	WF	R	7.50	53.0	11x3½x¼	L
12	.....75-8SW	4R	6–8	6400	174	Op	39000	9500	B9.75/20	B11.25/20	Lyc AEC	8–3¾x4¾	Fu VUOG	U 5	No	Tim SW200	WF	R	7.50	53.0	11x3½x¼	L
13	.....85-6SW	4R	8–10	8695	169	Op	52000	12000	B10.50/24	B12.75/24	Wau 6AB	6–4½x5¾	Fu MHU	U 4	A 3	Wis SD310	DF	R	8.50	10.6	12x3½x¼	L
14	.....95-6SW	4R	10–12	9640	176	Op	52000	13000	B10.50/24	B13.50/24	Wau 6RB	6–5x5¾	Fu MUH	U 4	A 3	Wis SD410	DF	R	10.2	128.	14x3½x¼	L
15	H'ndricks'n22D	4R	2–6	3900	Op	Op	21000	7000	B7.50/20	DB7.50/20	Wau MK	6–4½x4¾	Fu JVU	U 5	No	Own 985	2B	A	Opt	Opt	6x2¼x¼	P
16	.....36D	4R	5–12	6600	Op	Op	32500	11200	B9.00/20	DB9.00/20	Wau 6SRL	6–4¾x5½	Fu VU	U 5	No	Own 2513X	2B	A	Opt	Opt	8x3x¼	P
17	.....38D	4R	12	8000	Op	Op	40000	13200	B9.75/20	DB9.75/20	Wau 6SRL	6–4¾x5½	BL 60–7	A 7	No	Eat 44000	2F	A	Opt	Opt	8x3x¼	P
18	.....44D	4R	12	9000	Op	Op	42000	14000	B9.75/22	DB9.75/22	Wau RB	6–5x5¾	BL 70–7	A 7	No	Eat 44000	2F	A	Opt	Opt	8x3x¼	P
19	Hug.....99	4R	10	1030[illegible]	148	148	58500	15100	S36x8	S40x16	Bud GF6	6–4¾x6	BL 714-703	U 4	A 3	Wis SD410W	2F	R	10.3	139	9x4x¼	I
20	Ind..958BT-151	2C	.....	1675	168	186	20000	5500	P32x6	DP32x6	Her JXC	6–3¾x4¼	BL 224	U 4	No	Tim SBT151	SF	T	7.4	45.8	7¼x2¾x¼	C
21	.....95SW 75	4R	.....	1735	168	186	20000	5800	P32x6	DP32x6	Her JXC	6–3¾x4¼	BL 224	U 4	No	Tim SW75	WF	T	7.4	45.8	7¼x2¾x¼	C
22	....17SBT251	2C	.....	3250	188	224	28000	8550	P34x7	DP34x7	Her YXC	6–4¾x4¾	BL 334	U 4	Op	Tim SBT251	BF	R	6.1	37.8	8½x3x¼	TL
23	.....17SW251	4R	.....	3475	188	224	28000	9030	P34x7	DP34x7	Her YXC	6–4¾x4¾	BL 334	U 4	Op	Tim SW251	WF	R	6.2	38.1	8½x3x¼	TL
24	Ken....186SDT	2C	10	6450	205	235	.....	10500	B9.00/20	DB9.00/20	Her YXC2	6–4½x4¾	BL 1554	U 4	A 3	Tim Sdt310w	2F	H	7.33	104	9x3½x¼	T
25	.....241SDT	2C	10	6850	205	235	.....	11000	B9.00/20	DB9.00/20	Her RXB	6–4½x5½	BL 714	U 4	A 3	Tim Sdt310w	2F	H	7.33	85.5	9x3x¼	T
26	.....346A	4R	10	8800	210	240	.....	13000	B9.75/20	DB9.75/20	HaS 160	6–4½x5½	BL 714	U 4	A 3	Tim 310W	WF	H	7.25	84.5	8x3x¼	T
27	.....346B	4R	10	8550	210	240	.....	13000	B9.75/20	DB9.75/20	Bud GF-6	6–4¾x6	BL 714	U 4	A 3	Tim 310W	WF	H	7.25	98.4	8x3x¼	C
28	.....346C	4R	10	9500	210	240	.....	14000	B9.75/20	DB9.75/20	HaS 175	6–5x6	BL 714	U 4	A 3	Tim 310W	WF	H	7.25	98.4	8x3x¼	C
29	.....386C	4R	10	10200	210	240	.....	14500	B9.75/20	DB9.75/20	HaS 175	6–5x6	BL 714	U 4	A 3	Tim SW410w	WF	H	7.60	103.	8x3x¼	C
30	Kleiber.....290	4R	7½	6000	201	210	28000	10060	B9.00/20	DB9.00/20	Con 20R	6–4½x4¾	BL 714-60	A 7	A 7	Tim Sw200tw	WF	R	7.75	73.6	7x3½x¼	P
31	340	4R	10	7000	210	215	34000	11900	B9.75/20	DB9.75/20	Con 21R	6–4¾x5¾	BL 714-60	A 7	A 3	Tim Sw300W	WF	R	9.33	88.6	8x3½x¼	P
32	.....340T	4R	10	8000	215	225	34000	13650	B9.75/20	DB9.75/20	Con 22R	6–4½x5¼	BL 714-60	A 7	A 3	Tim Sw400W	WF	R	10.3	98.1	8x3½x¼	L
33	La Fran-R...Q6	4R	9–12	12000	Op	250	40000	14900	B10.50/20	DB10.50/20	Own 312B	12–4x5	BL 714	U 4	No	Tim SWD410	WF		Opt	Opt	12x3½x¼	L
34	LeMoon(9).701	4R	5–6	4475	187	199	25500	8500	B8.25/20	DB8.25/20	Lyc AEC	8–3¾x4¾	Fu VUOG	U 5	No	Ti 63703-97B	WF	R	6.20	43.8	7x4x¼	B
35	801	4R	6–7	5100	187	199	32500	9720	B9.00/20	DB9.00/20	Lyc AEC	8–3¾x4¾	Fu VOUG	U 5	No	Ti 65703-97B	WF	H	6.75	47.7	7x4x¼	B
36	802	4R	6–7	5350	187	199	32500	9800	B9.00/20	DB9.00/20	Wau 6SRL	6–4¾x5½	Fu VOUG	U 5	No	T65703-97tW	WF	H	6.75	47.7	7x4x¼	B
37	900	4R	7–8	6775	191	203	36000	12000	B9.75/20	DB9.75/20	Wau 6SRL	6–4¾x5½	BL 607	A 7	No	TimSW310W	WF	H	9.25	86.9	9x4x¼	B
38	1000	4R	8–10	7950	196	208	40000	12600	B9.75/24	DB9.75/24	Wau 6AB	6–4½x5¾	BL 714	U 4	3	TimSW310W	WF	H	9.25	128.	9x4x¼	B
39	1200	4R	10–12	8500	196	208	40000	14000	B9.75/24	DB9.75/24	Wau 6RB	6–5x5¾	BL 714	U 4	3	TimSW410W	WF	H	9.25	128.	9x4x¼	B
40	Maccar...SW86	4R	10–12	9000	216	260	38700	.....	B10.50/20	DB10.50/20	Her RXCP	6–4⅝x5½	BL 615	A 5	No	Tim spec.	W4	..	9.0	59.	12x3x¼	C
41	Mack.....BX	4R	.....	8150	178	207	35400	12000	B8.25/22	DB8.25/22	Own BX	6–4¼x5½	Own BX	U 4	No	Own BX6	2F	A	6.53	46.0	9½x3x¼	C
42	.....BQ	4R	.....	9350	224	248	41500	15000	B9.75/22	DB9.75/22	Own BQ	6–4¾x5¾	Own BQ	A 4	No	Own BX6	2F	R	6.54	41.9	10½x3¼x¼	C
43	.....AC	4R	8–15	8500	217	257	50500	14550	P40x8	DP40x8	Own BQ	6–4¾x5¾	Own AC	J 4	No	Own AC	CD	R	9.26	59.4	8x3x¼	C
44	.....AK	4R	8–15	9000	217	257	50500	15900	B9 75/22	DB9.75/22	Own BQ	6–4¾x5¾	Own AC	A 4	No	Own AK6	2F	A	7.46	47.8	8⅝x3x¼	C
45	.....AP	4R	8–15	1050[illegible]	217	257	51000	14850	P40x8	DP40x8	Own AP	6–5x6	Own AC	J 4	No	Own AP	CD	R	9.26	59.4	8x3x¼	C
46	.....AP	4R	8–15	1100[illegible]	217	257	50500	16400	B9.75/22	DB9.75/22	Own AP	6–5x6	Own AC	A 4	No	Own AK6	2F	A	7.46	47.8	8⅝x3x¼	C
47	Mor'd..RR-15A	4		2100	170	Op	15500	5300	B6.50/20	DB6.50/20	Her JXC	6–3¾x4¼	BL 124	U 4	No	Tim SBT75	SF	R	5.66	35.0	7¼x2⅝x½	T
48	.....RA20	2C	5–5½	2350	184	Op	20000	6350	B7.50/20	DB7.50/20	Her JXC	6–3¾x4¼	BL 124	U 4	No	Tim SBT151	SF	R	6.16	38.2	9¼x3½x¼	T
49	P.-A..34L501S4	4R	.....	6600	200	240	34000	13200	B9.75/20	DB9.75/20	Her RXB	6–4½x5½	Co TNU	U 4	Op	Tim SW310	W	A	9.25	49.0	10x3x¼	C
50	...34K611S4	4R	.....	7200	180	240	34000	14200	B9.75/20	DB9.75/20	Her GXA	6–4¾x5¾	Own618290	U 4	Op	Tim SW310	W	A	7.75	40.6	10x3x¼	C
51	...44K779S4	4R	.....	7500	180	200	44000	14500	B10.50/20	DB10.50/20	Her HXA	6–5¼x6	Own618290	U4	Op	Tim SW410	W	A	9.	47.2	10x3x¼	C
52	Relay....60SW	2R	10	6545	175	205	36500	12000	P38x7	DP40x8	Bud BA6	6–4½x5½	Fu VU16	U 5	No	Own 60	2R	..	9.09	63.6	8½x3½x¼	P
53	Sterling FDS180....		8–10	8925	158	Op	.....	12850	P40x8	DP40x8	Wau AB	6–4½x5¾	Own UC8	U 4	A 4	Tim 310	2F	R	9.1	113.	15x3¼x¼	C
54	.....FDS200....		10–12	9510	159	Op	.....	13550	P40x8	DP40x8	Wau RB	6–5x5¾	Own UC8	U 4	A 4	Tim 410	2F	R	9.1	113	15x3¼x¼	C
55	..... FCS170	4R	10	10210	Op	Op	.....	14100	P36x8	DP36x8	Wau HB	6–4½–5¾	Own UC2	U 4	A 3	Own	CD	R	9.5	63.2	15x3¼x¼	C
56	.....FCS180	4R	12	10405	Op	Op	.....	14450	P40x8	DP40x8	Wau AB	6–4½–5¾	Own UC8	U 4	A 3	Own	CD	R	9.5	59.6	15x3¼x¼	C
57	.....FCS210	4R	15–18	10825	Op	Op	.....	14750	P40x8	DP40x8	Wau RB	6–5x5¾	Own UC8	U 4	A 3	Own	CD	R	9.5	59.6	15x3¼x¼	C
58	Wht.630SW200	4R	5–6	6245	193	205	.....	10000	B8.25/20	DB8.25/20	Own 3AD	6–4x5¼	Own 4B	U 4	No	Tim SW200H	WF	R	6.75	44.2	8¼x3½x¼	C
59	...642SW310	4R	7–9	8025	198	210	.....	12670	B9.00/20	DB9.00/20	Own 1AB	6–4⅜x5¾	Own 7B	U 4	No	TimSW310W	WF	R	8.5	55.6	8¼x3½x¼	C
60	...643SW410	4R	9–11	8550	198	215	.....	14400	P40x8	DP40x8	Own 1AB	6–4⅜x5¾	Own 7B	U 4	No	TimSW410W	WF	R	10.2	69.1	8½x3½x¼	C

KEY TO ABBREVIATIONS AND REFERENCE MARKS

GENERAL

Chassis Price—Chassis price quoted applies to the standard wheelbase and specifications listed. All prices are F.O.B. factory.

Gross Vehicle Weight—Is chassis weight, plus body and cab, plus payload. Gross vehicle weight given for a model is based on maximum recommended tire size and not on tires listed as standard equipment.

Chassis Weight Stripped—Includes gas, oil and water and all things included in chassis price. Does not include the weight of cab.

Maximum Brake H. P. at Given R.P.M.—Is actual dynamometer reading without accessories.

Tractors—Unless given the designation N (meaning not available as tractor), all standard models may be assumed to be available as tractors.

(N) Not available as tractor.

(T) This designation accompanying a model number indicates vehicle is specifically designed for tractor use only.

(3) Corbitt—Larger engines and corresponding transmissions, clutches, axles etc., provided on all models of Corbitt trucks when type of service requires them. Wheelbases of tractor models depend upon types of cabs and trailers chosen Cab to Rear of Frame and Cab to Rear Axle dimensions vary with such choice.

(4) Day Elder—Model 75—1½ ton—same specifications except price—$945, and larger tire size—B6.00/20 front and DB6.00/20 rear.

(5) Dodge—F-61 available as special tractor truck with 146-inch wheelbase with model designation of F-60, at $2645. G-81 available as special tractor truck with 146-inch wheelbase with model designation of G-80, at $5250.

(6) General Motors—Gross vehicle weight indicated for each model in table is the **Straight Rating** (combined weight of chassis, body, equipment and payload) for which chassis is designed and guaranteed to satisfactorily operate under average conditions. The size of the tires used does not affect this **Straight Rating,** but to secure maximum tire mileage it is suggested that the total gross weight be limited to a "recommended gross weight" for each tire equipment (type number) based on tire capacity and assuming nominal body allowance will result in payload range for each model as shown. Models T-15 to T-61 inclusive are also available for export only as coach chassis. Double reduction axles optional in Models T-45, T-51, T-61, T-83 and T-95 at extra cost. Trailing type axles available on Model T-95 at price deduction.

(7) Grass Premier—Eight cylinder engines available on following models: 45-6 with Lyc. GU at $2700 list; 55-6 with Lyc. HF at $3355; 65-6 with Lyc. AEC at $4065; 35 T-6 with Lyc. GU at $1665; 45 T-6 with Lyc. HF at $3185.

(8a) International Harvester—A-1, ¾ ton, same as A-2 except less spring leaves and smaller tires.

(8b) All Torque and Brake Horsepower values listed are based on engine outputs with all Standard Equipment Accessories running and are the same values obtaining with the truck on the road in actual operation.

(9) LeMoon—Model 600 available with Lyc. AEC at same cost. Models 701 and 801 available with Waukesha 6SRL at same cost.

†Reo—Models 1C and 1D are the longer wheelbase editions of Models 1A and 1B. The frame dimension of both is 7x2¾x¼.

(12) White—The maximum ratings are for ideal operating conditions and the minimum for extremely difficult conditions; the ranges between are for varying operating conditions. Each model shown is furnished with different specifications for different ratings.

MAKES—ALL

AB—American Bosch.
AL—Auto Lite.

B—Bendix.
BB—Borg & Beck.
BE—Bendix front, Eaton rear.
BL—Brown-Lipe.
BO—Bendix front, Own rear.
Bf—Bethlehem.
Blo—Blood.
Bu or Bud—Buda.

C or Col—Columbia.
CB—Columbia front, Bendix rear.
Car—Carter.
Ch—Chicago.
Cl or Cla—Clark.
Cle—Cleveland.
Co—Covert (transmission).
Co—Continental (governor).
Con—Continental.
Cot—Cotta Gear.
Cum—Cummins-Diesel

DG—Detroit Gear and Machine.
DR—Delco Remy.

Eat—Eaton.
Ei—Eisemann.
En—Governor built in engine
EV—Electro-Vac (gov.) Pierce.

Fe—Fedders.
Fu—Fuller.

Ge—Gemmer.
GO—G. & O.

Ha—Handy (governor).
Ha—Hannum (steering gear).
HaS—American Car & Fdry.
Her—Hercules.
HS—Merchant & Evans (clutch).
HS—American Car & Fdry. (governor).

Jac—Saginaw.
Jo—Jones.

KP—Handy.

L—Lockheed.
LN—Leece Neville.
Lo—Long.
LO—Lockheed front, Own rear;
Lyc—Lycoming.

Mc—McCord.
Ma—Marvel.
ME—Merchant & Evans.
MM—Mechanics Mach.
Mo—Modine (radiator).
Mo—Monarch (governor).

NE—North East.
No—Not supplied.
ns—No Standard.

O or Ow—Own.
Op or Opt—Optional.

Pe—Pierce (governor).
Pe—Perfex (radiator).
Pet—Peters.
PeS—Peters and Spicer.
PS—Peters & Snead.

RB—Robt. Bosch.
Ro—Rockford.
Ros—Ross.

S—Steeldraulic.
Sal—Salisbury.
Sc—Scintilla.
Sch—Wheeler-Schebler.
She—Sheldon.
Shu—Shuler.
SpB—Spicer and Blood.
Spi—Spicer.
SpP—Spicer and Pick.
Ste—Detroit Lubro. (carburetor).
Ste or St—Sterling.
Str—Stromberg.

Ti—Tillotson.
T or Tim—Timken.
TO—Timken front, Own rear.

WG—Warner Gear.
Wa or War—Warner Corp. (steering gear)
Wa—Waukesha (governor).
Wau—Waukesha.
W or Wis—Wisconsin.
Wo—Wohlrab.
Ws—Westinghouse.

Yo—Young.

Zen—Zenith.

Line Number	ENGINE DETAILS: Piston Displacement	Compression Ratio	Torque lb. ft.	N.A.C.C. Rated H.P.	Max. Brake H.P. at R.P.M. Given	Valve Arrangement	Camshaft Drive	Piston Material	MAIN BEARINGS: Number and Diameter	MAIN BEARINGS: Length	Oiling System Type	Governor Make	FUEL SYST.: Carburetors Make	FUEL SYST.: Fuel Feed	ELEC. TRICAL: Ignition System Make	ELEC. TRICAL: Generator, Starter Make	Clutch Type and Make	Radiator Make	Universals Make	FRONT AXLE: Make and Model	Steering Gear Make	BRAKES: SERVICE: Make, Location, Operation	BRAKES: SERVICE: Lining Area	BRAKES: SERVICE: Drum Material	BRAKES: Hand Type, Location	BODY MOUNTING DATA: Cab to Rear of Frame	BODY MOUNTING DATA: Cab to Rear Axle	BODY MOUNTING DATA: Width of Frame	SPRINGS: Front	SPRINGS: Rear	SPRINGS: Auxiliary Type
1	200	4.7	126	24.0	48–2500	L	C	A	3–2⅛	5⅞	CC	Mo	Zen	M	DR	DR	P.BB	Lo	Cle	Cla F212	Ge	L6IH	312	P	TX	123	64½	34	38x2¼	40½x2½	N
2	215	5.1	137	27.3	60–2600	L	C	A	7–2⅛	9⅛	CC	Mo	Zen	M	DR	DR	P.BB	Lo	Cle	Cla F212	Ge	L6IH	312	P	TX	118	63¾	34	38x2¼	40½x2½	N
3	248	5.0	150	27.3	64–2600	L	C	A	7–2¾	10⅛	CC	KP	Zen	M	DR	DR	P.BB	Lo	Cle	Cla F304	Ros	L6IHV	414	a	TI	158	84	34	40x2½	44x3	N
4	318	4.6	202	33.0	80–2600	L	G	C	7–2½	11⅛	CC	KP	Zen	M	DR	DR	P.BB	Lo	PS	Cla F318	Ros	L6IHV	495	a	TI	155	84	34	40x2½	44x3	N
5	318	4.6	202	33.0	80–2600	L	G	C	7–2½	11⅛	CC	KP	Zen	M	DR	DR	P.BB	Lo	PS	Cla F318	Ros	L6IHV	495	a	TI	155	84	34	40x2½	44x3	N
6	339	4.2	212	38.4	80–2200	H	C	C	7–2¾	13⅛	FP	KP	Zen	M	DR	DR	P.BB	Spl	PS	Own 7738	Ros	L6IHV	623	a	TD	182	102	34	42x2½	50x3½	N
7	577	4.4	460	30.0	125–2000	L	G	C	4–3½	11⅝	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Wis 131F	Ros	B6IMV	504	G	T4	220	145	34	48x3½	40x5	N
8	517	4.5	330	31.3	110–2400	L	G	C	7–3	13⅞	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Own M	Ros	B6IMA	864	G	4M	180	137	36	42¾x2½	44x3	N
9	400	4.6	296	40.9	110–2300	H	G	A	4–2.7	8⅜	FP	Ha	Str	M	DR	DR	dp.Ow	Lo	Cle	Own	Jac	B4rIA	557	a	TX	161	100¼	34½	40x3	50x4	½
10	525	4.5	380	48.6	128–2100	H	C	A	7–2¾	14⅜	FP	Ha	Str	M	DR	DR	dp.Ow	Lo	Spl	Own	Jac	B6IA	817	a	TX	161	100	34⅞	50x3½	45x4	N
11	462	4.6	300	15.9	100–2400	L	G	C	7–3	13⅞	PC	Wa	Str	M	AL	AL	D.Fu	Ow	MM	Tim 26450H	Ros	L6IH	774	a	CD	Opt	100¾	34	40x3	58x4	½
12	420	5.2	300	15.0	135–3000	L	G	C	5–2¾	11⅛	FP	Wa	Str	M	AL	AL	D.Fu	Ow	MM	Tim 26450H	Ros	L6IH	774	a	CD	Opt	100¾	34	40x3	58x4	½
13	549	4.5	335	18.6	100–2000	L	G	C	4–3½	11⅜	PC	Wa	Str	M	AL	AL	D.Fu	Ow	MM	Tim 27450tW	Ros	B6IM	624	a	CD	Opt	104	34	40x3	58x4	½
14	577	4.4	460	30.0	125–2000	L	G	C	4–3½	11⅜	PC	Wa	Str	M	AL	AL	D.Fu	Ow	MM	Tim 27450tW	Ros	B6IM	624	a	CD	Opt	115¼	34	40x3	58x4	½
15	381	4.6	240	10.8	87–2500	L	G	C	7–2⅜	12½	PC	Wa	Zen	M	AL	AL	D.Fu	Ch	Blo	Cla F318	Ros	L4IHV	295	P	TD	Opt	Opt	34	40½x3½	31x3	N
16	462	4.6	300	15.9	97–2000	L	G	C	7–3	13⅞	PC	Wa	Zen	M	AL	AL	D.BL	Ch	Blo	Tim 27450	Ros	L4IHV	504	G	TD	Opt	Opt	34	40¼x3½	35½x4	N
17	462	4.6	300	15.9	97–2000	L	G	C	7–3	13⅞	PC	Wa	Zen	M	AL	AL	D.BL	Ch	Blo	Tim 27450	Ros	Ws4IA	780	G	TX	Opt	Opt	36	40¼x3½	66x4	N
18	577	4.7	440	30.0	126–1850	L	G	C	4–3⅛	10⅞	PC	Wa	Zen	M	AL	AL	D.BL	Ch	Blo	Tim 27450	Ros	Ws4IA	780	G	TX	Opt	Opt	36	43x3½	66x4	N
19	638	4.3	410	34.1	126–1850	L	G	C	4–3	10⅞	PC	Pe	Zen	M	DR	No	dp.BL	Yo	Blo	Shu 715–11	Ros	WrIA	792	G	TD	139	88¼	38¼	41⅞x3	53x4	N
20	282	5.3	186	33.7	73–2800	L	G	A	7–2½	10⅛	PC	No	Str	M	AL	AL	P.BB	Yo	Spl	Tim 31020	Ros	L6IHV	559	G	TX	140	83	34	37x2¼	44x4	N
21	282	5.3	186	33.7	73–2800	L	G	A	7–2½	10⅛	PC	No	Str	M	AL	AL	P.BB	Yo	Spl	Tim SW75	Ros	L6IHV	459	G	TX	140	83	34	37x2¼	47x3	N
22	428	4.4	283	45.9	94–2200	L	G	A	7–3	14	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spl	Shu 5582B	Ros	L4IHV	625	G	CD	168	101	34½	40x2½	54x3	½
23	428	4.4	283	45.9	94–2200	L	G	A	7–3	14	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spl	Sh 5582B	Ros	L4 HV	625	G	CD	168	101	34½	40x2½	54x3	½
24	453	4.7	300	18.6	98 2200	L	G	A	7–3	14	CC	Ha	Zen	M	DR	DR	P.BL	Pe	Spl	Tim 35000N	Ros	Ws4rA	815	a	FD	192	120	33¾	42x3	56x4	½
25	501	4.9	330	8.6	110–2200	L	G	A	7–3	12½	CC	Ha	Zen	M	DR	DR	P.BL	Pe	Spl	Tim 36020N	Ros	Ws4rA	815	a	FD	192	120	33¾	42x3	56x4	½
26	428	4.4	322	23.3	125–2400	H	C	A	4–2¾	10⅜	FP	To	Zen	M	DR	DR	P.BL	Pe	Spl	Tim 36020N	Ros	Ws4rA	815	a	FD	192	120	33¾	42x3	56x4	½
27	638	4.3	410	54.1	126–1850	L	G	C	4–3	10⅞	CC	Bu	Zen	M	DR	DR	P.BL	Pe	Spl	Tim 36020N	Ros	Ws4rA	815	a	FD	192	120	33¾	42x3	56x4	½
28	707	4.4	505	30.0	170–2000	H	C	A	7–3½	11⅛	FP	HS	Zen	M	DR	DR	P.BL	Pe	Spl	Tim 36020N	Ros	Ws4rA	815	a	FD	192	120	33¾	42x3	56x4	½
29	707	4.4	505	30.0	170–2000	H	C	A	7–3½	11⅛	FP	IS	Zen	M	DR	DR	P.BL	Pe	Spl	Tim 36020N	Ros	Ws4rA	815	a	FD	192	120	33¾	42x3	56x4	½
30	411	4.2	236	19.0	89– 400	H	C	C	7–2¾	13	FP	No	Str	V	RB	DR	D.BL	Ow	Spl	Tim 16302	Ros	T4IA	848	G	TD	180	120	38	44x3	60x4	½
31	427	4.2	257	15.9	100–2600	H	C	C	7–2¾	13	FP	No	Str	V	RB	DR	D.BL	Ow	Spl	Tim 16302	Ros	T4IA	848	G	TD	180	130	38	44x3	60x4	½
32	638	4.2	340	34.0	120–2400	H	C	C	7–2¾	13⅛	FP	No	Str	V	RB	DR	D.BL	Ow	Spl	Tim 17300	Ros	T4IA	848	G	TD	204	130	38	44x3	60x4	½
33	754	5.1	510	76.7	140–2900	H	C	C	4–3½	10	PC	No	Zen	M	DR	DR	dp.Lo	Ow	Blo	Tim 27450t-7	Ros	Ws6IA	....	Da	CD	.....	.....	34	44x3	None	N
34	420	5.2	300	14.4	130–2800	L	G	C	5–2¾	12¾	FP	Ha	Str	M	DR	DR	D.Fu	Ch	Spl	Tim 35000H	Ros	L6IHV	525	a	CD	162	108	34	39x2½	39x2½	N
35	420	5.2	300	14.4	130–2800	L	G	C	5–2¾	12¾	FP	Ha	Str	M	DR	DR	D.Fu	Ch	Spl	Tim 35000H	Ros	L6IHV	633	a	CD	162	108	34	39x2½	46x3½	N
36	462	4.5	300	15.9	98–2000	L	G	A	7–3	13⅞	PC	Wa	Str	M	AL	DR	D.Fu	Ch	Spl	Tim 35000tw	Ros	Ws6IA	711	a	CD	162	108	34	39x2½	46x3½	N
37	462	4.5	300	15.9	98–2000	L	G	A	7–3	13⅞	PC	Wa	Str	M	AL	DR	D.BL	Ch	Spl	Tim 26045tw	Ros	Ws6IA	966	a	CD	162	108	34	48x3½	53x4	N
38	549	4.5	332	18.6	100–2000	L	G	A	4–3½	11⅜	PC	Wa	Str	M	AL	LN	D.BL	Ch	Spl	Tim 26045tw	Ros	Ws6IA	966	a	CD	162	108	34	48x3½	53x4	N
39	577	4.6	460	30.0	127–2000	L	G	A	4–3½	11¾	PC	Wa	Str	M	AL	LN	D.BL	Ch	Spl	Tim 27045tw	Ros	Ws6IA	792	a	CD	162	108	34	48x3½	53x4	N
40	529	4.9	350	21.2	112–2000	L	G	S	7–3	14	PC	Ha	Str	M	DR	DR	D.BL	Pe	Spl	Tim 26450tw	Ros	Ws6IA	1151	a	FD	198	116	33	42x3	None	N
41	468	4.7	292	13.4	104–2200	L	G	C	7–3	13⅛	FP	Ha	Str	M	NE	NE	P.Own	Ow	Spl	Own BX	Ros	O6IA	1118	a	FD	192	109	33¼	54¼x3	48x3½	N
42	311	5.0	398	34.2	128–2200	L	G	C	4–3½	11⅛	PS	Ow	Str	M	RB	NE	P.Ow	Ow	Cle	Own BQ	Ros	O6IA	902	a	FD	192	111	33¼	50x3¼	48x3½	N
43	611	5.0	398	34.2	128–2200	L	G	C	4–3½	11⅛	PS	Ow	Str	M	RB	LN	P.Ow	Ow	Spl	Own AC	Ros	O6IA	1052	a	FD	180	109	37⅝	48x3½	52x4	½
44	611	5.0	398	34.2	128–2200	L	G	C	4–3½	11⅛	PS	Ow	Str	M	RB	LN	P.Ow	Ow	Cle	Own AK	Ros	O6IA	1044	a	FD	180	109	37	48x3½	52x4	½
45	706	4.8	427	30.0	138–1900	L	G	S	4–3⅛	11⅛	PS	Ow	Str	G	RB	LN	P.Ow	Ow	Spl	Own AK	Ros	O6IA	1052	a	FD	180	109	37	48x3½	52x4	½
46	706	4.8	427	30.0	138–1900	L	G	S	4–3⅛	11⅛	PS	Ow	Str	G	RB	LN	P.Ow	Ow	Cle	Own AK	Ros	O6IA	1044	a	FD	180	109	37	46⅞x3½	52x4	½
47	282	5.0	176	33.8	73–2800	L	G	C	7–2½	10⅜	PC	No	Zen	M	AL	AL	P.BL	Lo	Spl	Tim 30000H	Ros	L6IH	420	a	TD	156	90	34	40x2½	44x3	N
48	282	5.0	176	33.8	73–2800	L	G	C	7–2½	10⅜	PC	No	Zen	M	AL	AL	P.BL	Lo	Spl	Tim 31000H	Ros	L6IH	560	a	TD	168	102	34	40x2½	56x4	N
49	501	4.6	330	18.6	110–2200	L	G	A	7–3	12½	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 27050	Ha	T6IA	940	D	CD	186¼	118¼	34	41x3	56x4	½
50	611	4.5	410	34.1	130–2000	L	G	A	7–3½	16⅝	PC	Ha	Str	M	DR	DR	P.Lo	Lo	Spl	Tim 27050	Ros	T6IA	940	D	TX	180½	112½	34	41x3	56x4	½
51	779	4.5	510	36.1	1 0–1800	L	G	A	7–3½	16⅝	PC	Ha	Str	M	DR	DR	P.Lo	Lo	Spl	Tim 27050	Ros	T6IA	940	D	TX	180½	112½	34	41x3	56x4	½
52	411	4.5	270	10.8	83–2100	L	G	C	4–2½	12⅛	FP	Bu	Zen	V	AL	AL	D.Fu	Lo	Blo	Tim 35000H	Ha	L4IH	744	P	FX	216	126½	34	42x2½	58x3	½
53	549	4.5	330	18.6	99–2000	L	G	C	4–3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spl	Tim	Ros	Ws4IA	792	a	CX	Opt	88	34	48x3	58x4	N
54	677	4.4	440	30.0	125–2000	L	G	C	4–3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spl	Tim	Ros	Ws4IA	792	a	CX	Opt	89	34	48x3	58x4	N
55	489	4.5	295	13.4	90–2000	L	G	C	4–3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spl	Tim	Ros	Ws4IA	792	s	CD	Opt	Opt	34	48x3	60x3½	N
56	549	4.5	330	18.6	99–2000	L	G	C	4–3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spl	Tim	Ros	Ws4IA	792	s	CD	Opt	Opt	34	48x3	60x3½	N
57	677	4.4	440	30.0	125–2000	L	G	A	4–3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spl	Tim	Ros	Ws4IA	792	s	CD	Opt	Opt	34	48x3	60x3½	N
58	396	4.9	250	18.4	100–2100	H	C	S	7–2¾	13⅛	FP	Ow	Zen	M	DR	DR	P.Ow	Ow	Spl	Own 6D	Ros	Lr41HV	514	a	CI	194⅞	109⅞	34⅞	42x3	51½x4	N
59	519	4.0	333	45.9	118–2100	H	C	S	7–3	15⅜	FP	Ow	Zen	E	LN	LN	dp.Ow	Ow	Spl	Own 12D	Ros	Ws6IA	833	a	CI	194¾	109¾	34⅞	42x3	42x4	N
60	519	4.0	333	45.9	118–2100	H	C	S	7–3	15⅜	FP	Ow	Zen	E	LN	LN	dp.Ow	Ow	Spl	Own 12D	Ros	Ws6IA	833	a	CI	194¾	109¾	34⅞	42x3	42x4	N

KEY TO ABBREVIATIONS AND REFERENCE MARKS

BRAKES—SERVICE

Location

2—Two Wheels, rear only.
2/4—Two-wheel brakes effective on all four wheels through driveshaft.
4—Four Wheels, front and rear.
4r—Four Wheels, rear only.
6—Six Wheels, front and rear.
J—Jackshaft.
P—Propeller shaft.

Type

I—Internal.
X—External.

Operation

A—Air.
D—Hydraulic and mechanical.
H—Hydraulic.
M—Mechanical.
V—Vacuum.

BRAKES—HAND

Location

C—Center of double propeller shaft.
2—Rear wheels.
4—Four wheels.
R—Worm or bevel gearshaft.
T—Transmission.
F—Driveshaft.

Type

D—Tru-Stop disk.
I—Internal.
X—External.

BRAKE DRUMS

Material

a—Cast alloy iron.
A—American Car Fdry.
D—Dayton.
E—Ermalite.
G—Gunite.
H—Hunt Spiller.
c—Cast iron.
f—Forged steel.
p—Pressed steel.
P—Pressed steel.
s—Cast steel.
(Where a combination of any of the above is used, the first reference mark applies to the front and the second to the rear drums.)

CLUTCH

Type

D—Multiple disk.
dp—Double plate.
O—Plate in oil.
P—Single plate

ENGINE

Valve Arrangement

H—In head.
L—"L" head.

Camshaft Drive

C—Chain.
G—Gear.

Piston Material

A—Aluminum alloy.
B—Semi-steel.
C—Cast iron.
N—Nickel iron.
S—Aluminum alloy with strut.

Main Bearings

r—Rear main bearing.
B—Ball bearing.

Oiling System

CC—Pressure to main, connecting rod and camshaft bearings.
FP—Pressure to main, connecting rod, camshaft bearings and piston pins.
PC—Pressure to mains and connecting rod bearings.
PQ—Pump, gravity and splash.
PS—Pressure with splash.
SP—Circulating with splash.

FRAME

Type

I—"I" Beam.
C—Channel.
T—Channel tapered front and rear.
L—Channel reinforced with liner.
B—Channel reinforced with both liner and fishplate.
P—Channel reinforced with plate.
TL—Channel tapered front and rear reinforced with liner.
D—Drop Center

FUEL SYSTEM

Fuel Feed

E—Electric pump.
G—Gravity.
M—Mechanical pump.
P—Pressure.
V—Vacuum.

REAR AXLE

Final Drive and Type

B—Bevel.
D—Dead.
F—Full-floating.
H—Hypoid.
I—Internal Gear.
2—Double Reduction.
R—Relay—Pendulum Drive.
S—Spiral bevel.
W—Worm.
w/2—Worm or Double Reduction Optional.
½—Semi-floating.
¾—Three-quarter floating.

Drive and Torque

A—Radius Rods and Torque Arm.
H—Hotchkiss. (springs)
R—Radius Rods
T—Torque Arm.
U—Torque Tube.

SPRINGS

Auxiliary Type

½—Semi-elliptic above or below main springs.
¼—Quarter elliptic.
C—Coil spring.
N—No.
O—Optional.

TIRES

B—Balloon.
DB—Dual Balloons.
P—High Pressure Pneumatics.
DP—Dual High Pressure Pneumatics
S—Solids.
DS—Dual Solids.
a—Pneumatics at extra cost.

TRANSMISSION

Location

A—Amidships.
J—Unit with jackshaft.
U—Unit with engine.

Auxiliary Location

No—Not furnished.
Op—Optional at extra cost.
A—Amidships.
R—Rear of amidships main transmission.
U—Unit with engine.

WHEELS DRIVEN

2C—Center pair of rear wheels.
2R—Rear pair of rear wheels.
4F—Front and center pair of rear wheels.
4R—Four rear wheels.
6—Six wheels.